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As Lightning Flashes, As Water Quenches

for Symphony Orchestra

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As Lightning Flashes, As Water Quenches

for Symphony Orchestra

by

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Dedication

This dissertation is lovingly dedicated to my father, Nicholas Comninellis. Throughout my educational career he has been my greatest supporter. He has taught me by example to pursue my dreams practically and diligently. So much of what I have achieved is because of his excellent example.

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Thank you to Devin Patrick Hughes and The Boulder Symphony Orchestra, for premiering *As Lightning Flashes* in April 2017. Thank you, Sarah Murray Espinoza, BSO principle second violin, for making my work known and for being a wonderful friend.

Thank you to my amazing friends and family: Mom, Dad, James, Tiffanie, Josh, Brittany, Gideon, Grandma, Mema, Papa, Ashley, Austin, Kyle, Nathan, Daniel, Andrea, Gina, and Leah. Thank you for your love, prayers and encouragement.

Finally, and most importantly, thank you God for making it possible for me to be an artist. I never dreamed I would get to spend every day playing, teaching, and writing music. It is such an incredible gift! I acknowledge that every good gift comes from you, and that includes the ability to put music on paper and bring it to life.

As Lightning Flashes, As Water Quenches

for Symphony Orchestra

Elizabeth Ann Comninellis, DMA

The University of Texas at Austin, 2017

Supervisor: Yevgeniy Sharlat

As Lightning Flashes and *As Water Quenches* are companion pieces for symphony orchestra, which may be performed independent of one another or together in any order. Their combined length is 20 minutes. The first of these works was commissioned by the Boulder Symphony Orchestra for its 2017 season. In Part I of this paper I discuss broadly the challenges, practical considerations, process, and inspiration behind these associated works. Parts II and III cover a detailed analysis of each piece's structure, pitch, and harmonic language, as well as unique aspects pertaining to each composition. Part IV examines key musical elements that unite the two works, including a shared fast-within-slow feel, use of descriptive language, and attention to orchestral color combinations.

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PART I

The Formation and Realization of *As Lightning Flashes*, *As Water Quenches*

1.1 Introduction

Over the course of my studies at the University of Texas at Austin (UT) I have focused primarily on writing works for moderate to large chamber ensembles of 10 or fewer instruments, as well as works with influenced by theater. A highlight of my work at UT was a children's western melodrama I wrote entitled *The Magic Lasso* (2016) for chamber ensemble and narrator. The challenge of combining theater and chamber music was incredibly formative. It seemed to be the culmination of all my work at UT. I thus considered writing an opera for children inspired by my Greek family heritage.

However, in the midst of this process, The Boulder Symphony Orchestra (BSO) conducted by Devin Patrick Hughes, appointed me as Composer-in-Residence and commissioned me to write a work for them to be performed in April 2017. The timing was such that I had to choose between the two projects. I considered the matter carefully and decided I could not pass up the possible once-in-a-lifetime opportunity to have a work of mine rehearsed and performed by orchestra. In the practical world of orchestral music, it is unfortunately difficult and rare for orchestras to premiere works by young, lesser-known composers. I discovered this firsthand after completing my first work for orchestra in 2012. The experience was extremely disenchanting. After six months of diligent work the orchestra at the University of

Colorado gave me 20 minutes to rehearse and record the work. There were instruments missing and nearly all the musicians were sight-reading.

I decided henceforth not to write for orchestra again unless I was ensured a performance opportunity, and unless the orchestra was willing to commit time and energy to rehearsing the piece. I was aware that this may not occur in my lifetime and so devoted myself to writing for smaller ensembles. Yet, to my surprise and delight, the BSO approached me with just such an opportunity.

1.2 Challenges

This posed a challenge for me, having previously written only one work for orchestra. As I began the planning process I thought back to my initial piece for orchestra, *Vesper* (2012). At this early point in my compositional experience I was overwhelmed by the challenge of writing for an ensemble so large. I tended to focus far too much on details at the expense of the larger picture, and found it difficult to feel in control of the sound, especially in *tutti*[1] moments. With the exception of a few instruments, I was also relatively inexperienced in writing for both woodwinds and brass.

I realized at the end of my master's degree that I still had quite a few gaps in my basic knowledge of the compositional craft. In response to this realization, I began challenging myself to write for instruments with which I had little or no experience, knowing that without additional study and practice, I would be unprepared to write for orchestra in the future. Writing *Vesper* was an important milestone in my

[1] Italian term for all voices or all instruments together

compositional experience because it exposed areas in which I needed to gain prowess and refine my expertise.

I composed several works for solo instruments and fixed media– *White Birds* (2014) for clarinet and *Immerse* (2015) for harp– both of which increased my ability to write well for those instruments. I also wrote several works for chamber ensemble. *Sky Bridge* (2014) and *Water* Bridge (2015) for two bass clarinets and prepared, amplified piano are a set of pieces inspired by architectural bridges. The challenge I confronted in writing them was to make the piano sound as uncharacteristic as possible. For example, I altered the piano's tone color by placing Allen wrenches on the strings and allowing them to bounce while the pianist played. I also used a number of extended techniques, such as muting the strings with the palms of one's hands. I studied two pieces in particular while writing *Sky Bridge* and *Water Bridge*: George Crumb's *Echoes of Autumn* and *Zaka* by Jennifer Higdon. Both composers approached sound in highly creative ways, and I consider the study of these two pieces a turning point in my writing. Though neither bass clarinet nor piano is included in the orchestral ensemble for *As Lightning Flashes* or *As Water Quenches,* composing those pieces completely changed the way I think about sound and orchestration. The idea of sound combination was at the the forefront of my mind as I worked on *Sky Bridge* and *Water Bridge,* and the same was true while orchestrating *As Lightning Flashes* and *As Water Quenches*. By combining instruments in unique ways I hoped to create new sounds. For example, in *As Water Quenches* I open the piece with bowed crystal glasses and a very high and virtuosic celesta part. The two blend together to sound like one ethereal instrument. *Peace I Leave with You* (2015) for clarinet in A, two cellos and two vibraphones, as well as *Lady Wisdom and Solomon* (2016) for flute, clarinet, marimba and string quartet, each helped me to refine my understanding of

balance, harmony, structure and orchestration. These pieces were also forerunners to *As Lightning* and *As Water* in that both were inspired by passages from scripture. *Bringing in the Boat* (2014) and *Building Bones* (2016), written for percussion ensemble, greatly improved the creativity and skill with which I approach percussion writing.

I did not undergo the sense of being overwhelmed while composing and orchestrating *As Lightning Flashes* and *As Water Quenches* as I did when writing *Vesper* in 2012. The process of planning, writing and orchestrating felt much more natural, and I felt I had sufficient understanding of each instrument, as well as of the whole ensemble. Writing chamber works and works for solo instruments during my studies at UT served to develop my competence and creativity in the skill of orchestration.

1.3 Practical Considerations

The Boulder Symphony gave me a specific instrumentation for their commission. On a practical level, this was limiting. Two instruments I hoped to use were bass clarinet and alto flute, neither of which was available for the April performance. Also, the timpani owned by the orchestra were in poor condition and had a smaller usable range than standard drums. Thus, I had to devise work-arounds. I wrote the opening solo passage (Figure 1.1) with alto flute in mind. Since that instrument was unavailable, I chose to substitute English horn doubled by soft, muted viola.

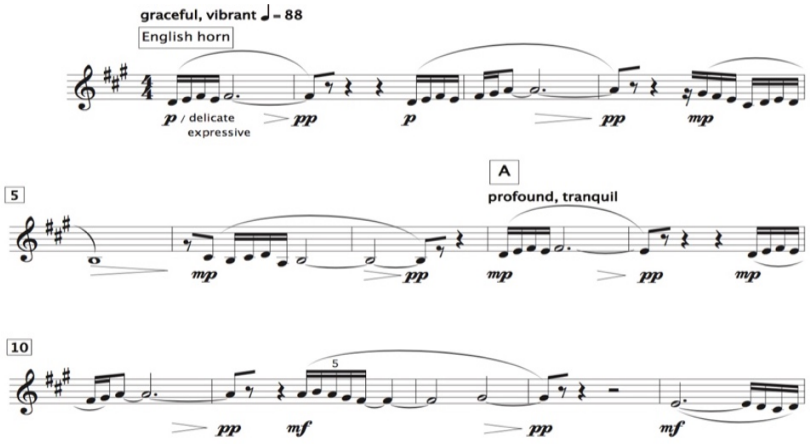


Figure 1.1: Opening solo for English horn in *As Lightning Flashes.*

Another important practical consideration was how to print the score and parts. In this respect technology made bridging the physical distance quite convenient. Early in the process I asked the conductor, Hughes, how he would like me to submit the finished score and parts to the BSO. I was prepared to spend a great deal of time printing and mailing materials. To my surprise and relief, however, Hughes decided to conduct the work from his iPad Pro. This made it expedient to send him updated versions of the score throughout the process. We were able to communicate and make changes very quickly because the score was electronic.

Parts for orchestra are typically printed on non-standard sized paper, such as 10x13. However, for the sake of convenience to all involved, Hughes requested the parts be formatted on regular 8.5x11 size paper. This allowed each player to print his or her own part at their convenience. Several section leaders contacted me with requests for changes early in the rehearsal process, and I was able to make these changes quickly and efficiently by sending updated PDF files. For example, the horn section leader asked me to break up the high passages between horn parts in order

to allow rest time for each player. Avoiding fatigue would help to ensure the production of more consistent high notes (Figure 1.2a). Another change, requested by the principle percussionist, was that I notate tremolani vertically so that the player can see the harmony and interval immediately (Figure 1.2b).

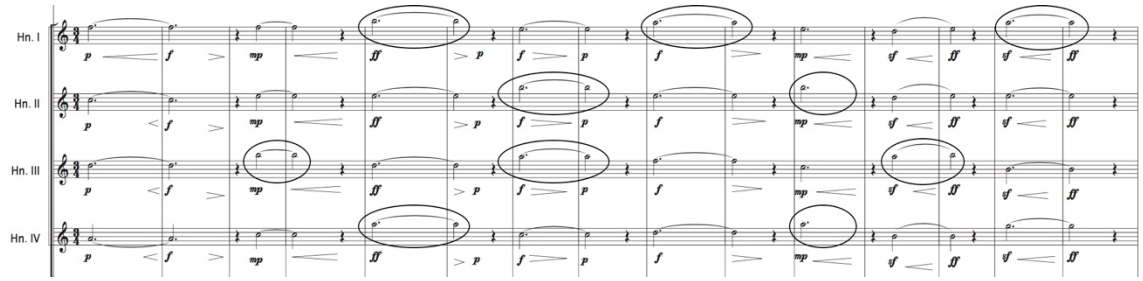


Figure 1.2a: High notes broken up between instruments.

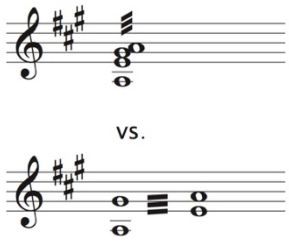


Figure 1.2b: Presentation of tremolandi in percussion parts

MIDI files were also extremely important to the rehearsal process. The final section of *As Lighting Flashes* is rhythmically complex (Figure 1.3)**,** and BSO's players struggled to count and to find downbeats. In response, I recorded a click track to help orient the players in which the metronome played throughout while I spoke the rehearsal letters allowed. At the performance, several players thanked me for providing this resource saying it helped to familiarize them with the final section of the piece.

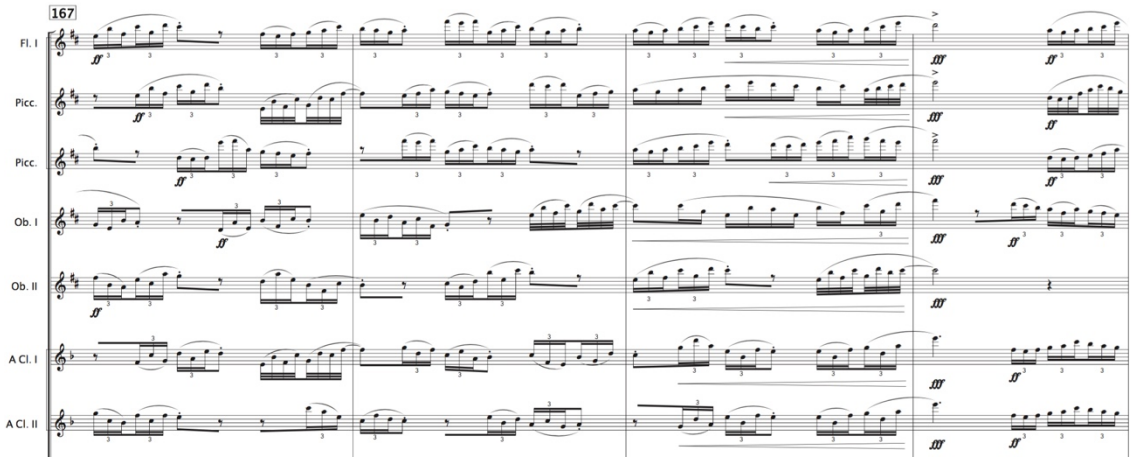


Figure 1.3: Complex rhythmic ending of *As Lightning Flashes.*

Technology further benefitted communication during the rehearsal process as I was only able to attend the final dress rehearsal in person. Hughes began to send me rehearsal recordings regularly for three weeks preceding the concert, and I was able to listen and make comments via email. This improved the efficiency of the dress rehearsal and gave the players enough time to respond to my comments and practice any alterations.

Another practical matter I considered was how to compose each piece in a way that would increase opportunities for future performance. The BSO commissioned only one piece with a duration of 10 minutes, and the scope of the commission was too limited to serve as my entire dissertation project. Therefore, I decided to write a second piece that could stand alone or serve as a companion piece. It is rare for a little known composer to be allowed more than fifteen minutes on an orchestral program. The fact that the second piece can be autonomous or part of a set will hopefully make it more practical for future concerts. For this reason, the second piece, *As Water Quenches*, is similar in scope and length to *As Lightning Flashes.* The pieces share a similar instrumentation as well. I avoided using instruments that are less standard,

such as contrabassoon or saxophone. This will also make the work more practical for community and amateur orchestras.

Although these works may be performed separately, I intentionally unified them in several ways so that when performed together they have a convincing effect. First, *As Lightning Flashes* begins with solo English horn, while *As Water Quenches* contains an English horn solo very near the end. If *As Lighting* is performed first, the collective work will begin and end with an English horn solo. If the order is reversed, the English horn solo will end the first piece and begin the second. In any order this will serve as a unifying element. Second, both compositions are relatively slow. I made this choice intentionally, but approached the method of slow writing differently for each piece. I experimented with several methods of writing fast music that feels slow. In *As Lighting* Flashes, the ending features rapid upward gestures in the treble instruments of the orchestra, but the underlying melody evolves slowly as does the harmony. The ear is naturally drawn to the slow melody and so gives the work a slow feel. In *As Water Quenches* I experimented with creating vague watery gestures through combining instrumental colors. Each instrument plays a rapid, virtuosic gesture, but the overall effect is a silvery mass of sound where no one part is easily distinguished from the other. Only the scrutinizing ear will immediately perceive the different methods of compositional approach because on the surface, each work is characterized by a similarly graceful tone. The similarity between the two pieces aids my intention that they be performed in any order. This approach will be discussed in further detail in Chapter IV.

Allowing variability in performance order recalls earlier times in orchestral history when the symphonic suite was not treated as indivisible. Historically, it was common to break up multi-movement works, either performing them out of order or

choosing only to perform one or two movements in a set. The irreverent treatment of orchestral suites stemmed from the composer's role in society at the time. Composers were viewed as craftsmen, much like blacksmiths and wheel-writes. They were not considered strictly as artists, so their work was manipulated to suit the event for which it was written. This became less common in the 19th and 20th centuries, with the increased respect composers enjoyed during these centuries. While that artistic respect extends to the 21st century as well, it is typically reserved for composers who are already established as masters in the field. Young composers do not experience the same clout. For this reason, I believe a return to this kind of flexibility is important for composers early in their careers, because contemporary orchestras have limited resources and limited program time to devote to new music.

1.4 The Process

I began the composition process for *As Lightning* and *As Water* by making detailed graphic charts. These charts detail harmonic structure, dynamic and registral narrative, rhythmic and melodic motives, etc. The graphic plan was the first and possibly the most important step in the planning process for *As Lightning* and *As Water*. It was the anchor I returned to any time I began to feel disoriented during the writing process; it allowed me to compose section independently instead of from beginning to end. The plan for *As Lightning*, pictured in Figure 1.4a, is detailed. While orchestrating, I skipped over a middle section of the piece and wrote the end first in the hope that the end would inform what needed to happen earlier. Figure 1.3b shows a loose plan for *As Water*. There I was less specific, because I focused more on sound color. On the right hand side of Figure 1.4b I described the sound color for each section, which served as a timbral plan that guided the rest of the composition.

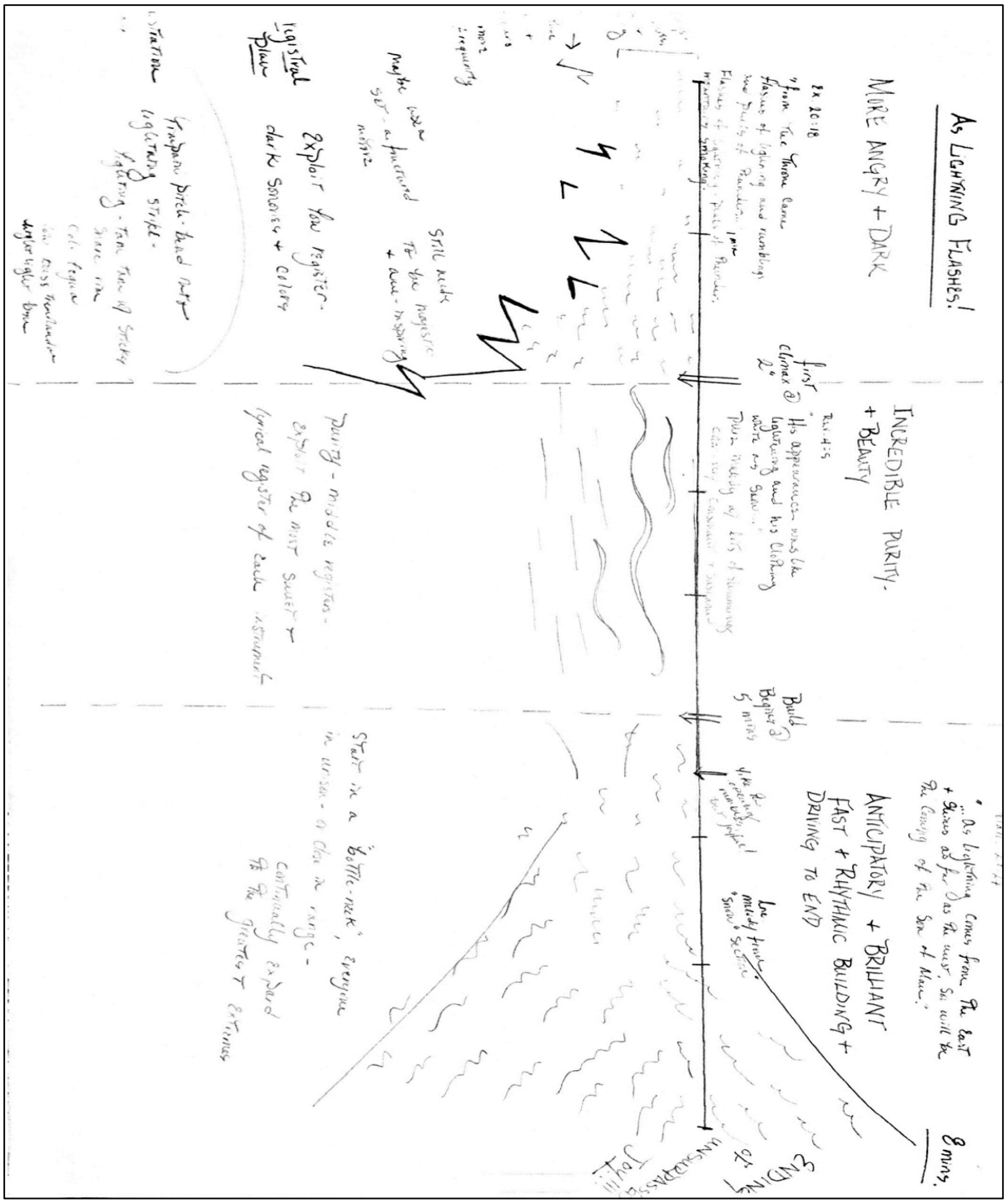


Figure 1.4a: Graphic plan for *As Lightning Flashes.*

Figure 1.4b: Graphic plan for *As Water Quenches.*

The challenge of planning the registral narrative was similar in both compositions. The orchestra covers a vast range, and so it is extremely important to decide how and when to use the different registers. I chose to make a detailed registral plan for both pieces. The plan for *As Lightning Flashes* is illustrated in Figure 1.5. I sketched a moment when the piece would climb down steadily in register and a moment when all the treble instruments of the orchestra would play in their highest registers. I found it necessary to revise the graphic and registral plan throughout the compositional process, and sometimes to abandon it all together. However, the discipline of planning this aspect of the piece helped ensure that I used the registers of the orchestra with artfulness and intentionality .

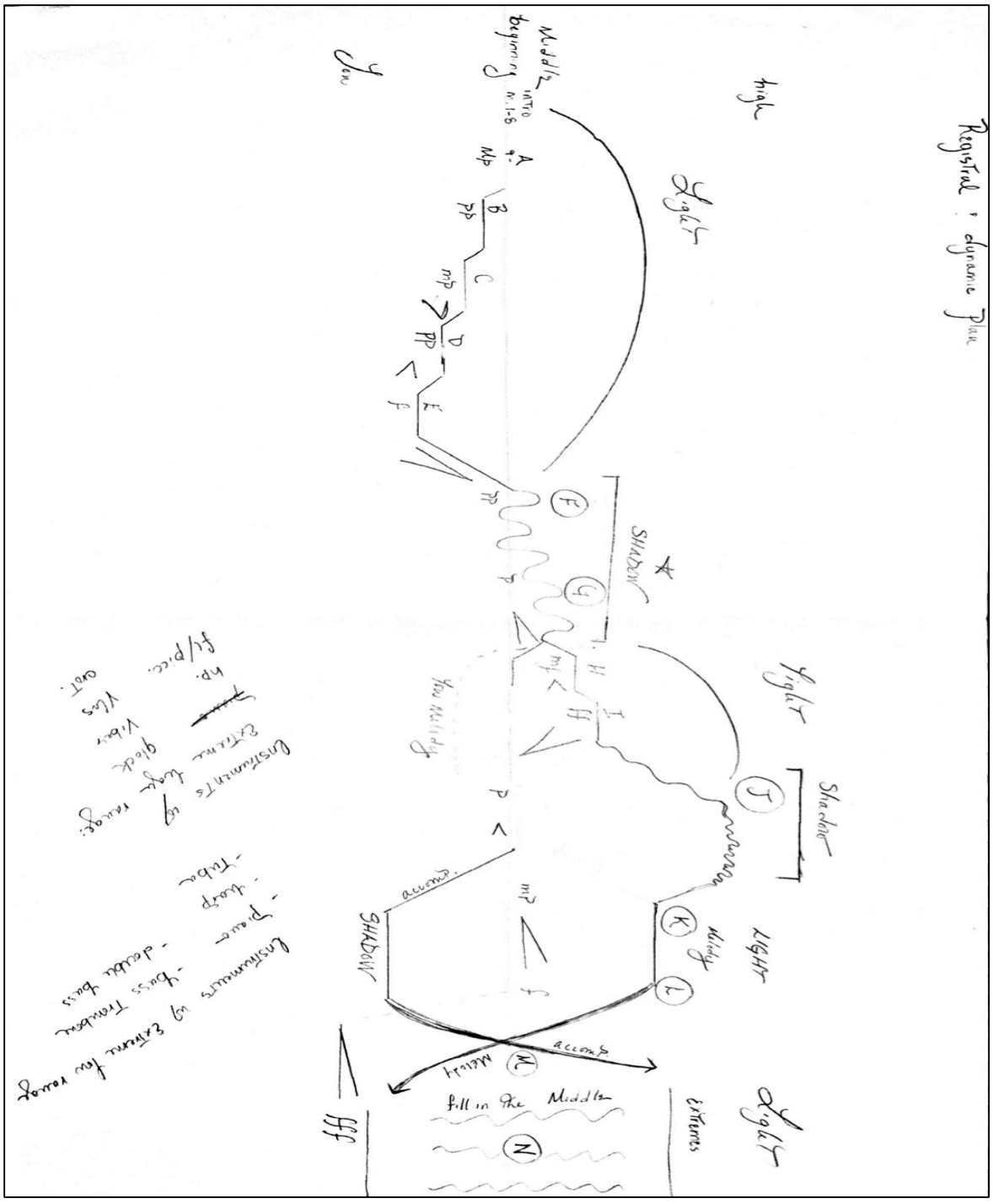


Figure 1.5: Registral plan for *As Lightning Flashes.*

After creating a graphic representation of each piece, the next step in the process was short scoring. The short score is a simplified version of the composition limited to three staves, making it possible to focus on structure, pacing, harmony, and register before beginning to orchestrate. During the short score stage, I also make notes about instrumentation and other thoughts as they occur to me. While short scoring *As Lightning* and *As Water,* I constantly suppressed the desire to expand the piece too soon or to include more than necessary detail. The short score was an important general guide to me structurally and harmonically throughout the entire composition process.

In both *As Lightning* and *As Water,* I wrote the melodic material by taking ideas from the text that inspired the work and creating vocal melodies with lyrics, even though I did not intend any part of either piece to be sung. I recorded myself singing the melodies at different tempi. I also improvised variations, and then transcribed the elements I thought were worth remembering. Thinking of melodies vocally helped me to shape them in a satisfying way. In previous pieces, such as *Lady Wisdom and Solomon*, I have used a similar compositional process and have even included the unsung text in the score to help the instrumentalist shape the phrase. I considered the same approach with *As Lightning* and *As Water,* but in the end I chose not to include the text in the score. However, when editing the final version of each piece, I made sure that the sung melodies could be heard and that they were shaped according to my imagined text.

1.5 Inspiration

The concert for which *As Lightning Flashes* was composed had a theme entitled "Day of Reckoning". The other two pieces on the program were Franz Liszt's

Totentanz and *Symphonie Fantastique* by Hector Berlioz. Both pieces feature the *Dies Irae or* "Day of Wrath" melody. This Latin hymn is attributed to Thomas of Celano, a Franciscan from the 13th century.[2] The tune is an essential feature of the requiem mass and has been used by many composers throughout the 19th and 20th centuries. It evokes an image of fear and of final judgment– the day when God will correct injustice and confront evil.

I contemplated how I could write a piece that was related to this ominous theme and yet had significant personal meaning. I decided not to use the "Day of Wrath" melody for several reasons. The first is that the other music on the program was fairly heavy and dark, and already exploited the *Dies Irae* in many variations. I wanted to balance out the concert with a serene and vibrant composition. The second and more important reason I avoided using the tune is that I believe there is another side to the so-called "Day of Reckoning." It is the coming of Christ, the Savior. His coming represents God's pardon of sin through the sacrifice of his son, Jesus. As the daughter of Christian missionaries, this is the picture I see when I think about the end of the world. From a young age, my faith in God has been for me the most constant source of hope. For this reason, I chose the image of Christ's return on the "Day of Reckoning" to guide my composition for the BSO.

As Lightning Flashes refers to a description of Christ's return in the New Testament Gospel of Luke chapter 17, verse 24[3], "For as the lightning flashes and lights up the sky from one side to the other, so will the Son of Man be in his day."

The writer illustrates how striking and earth-shattering that moment will be by comparing it to the natural phenomenon of lighting. Just as lightning illuminates

[2] www.britannica.com, "Dies Irae"
[3] www.biblegateway.com, English Standard Version

the entire earth, making light what would otherwise be dark, so the return of Christ will do the same. He will bring to light the beautiful and the terrible. He will end suffering and expose corruption. He will reconcile the broken and heal the hurting. I found these images extremely compelling, both musically and philosophically. In this piece I attempt to express in orchestral color the anticipation, beauty, and unsurpassed peace I imagine at the arrival of Christ's appearance on earth.

I especially focused on the contrast of light and shadow in this piece. I imagined the contrast between the darkness before lighting strikes and the shocking way in which lightning exposes and transforms a landscape in a single moment. I will analyze the idea of light and shadow further in part II.

I wanted *As Water* to have a similar scope and orientation to *As Lightning*. I considered several other natural phenomena employed by biblical writers to represent God. The one I found most vivid and often referred to is water. Throughout the Bible water is used to describe the peace, power, and depth of God. There were many passages I could have chosen to inspire a work about water, but the one I find most compelling is John chapter 4, verse 14.[4] It reads, "Whoever drinks the water that I will give him will never be thirsty. The water that I will give him will become in him a well of life that lasts forever."

This passage comes from a beautiful story is in the Gospel of John. Jesus meets a woman outside the city of Samaria. She is an outcast, notorious for having many lovers. Knowing her past, he speaks to her kindly and tells her that he himself is the source of everlasting water, water that satisfies a person for all eternity. I think the image of everlasting water is beautiful. It is perhaps even more striking than the

[4] www.biblegateway.com, New Living Version

image of lighting. And so this text became the inspiration for the second piece, *As Water Quenches*.

Water comes in many guises: as roaring torrents or still pools; as cascading waterfalls, roaring currents or graceful streams. It has an unpredictable and ever-changing life of its own, but in all its forms it also represents the most critical means by which life is sustained. Without it nearly every life form is eventually put to an end. In this piece I explore many colors and rhythmic combinations to evoke water flowing at varying rates and levels of intensity. I use combinations of instruments to color watery textures such as abruptly changing currents, gentle reservoirs, and falling droplets. I focus especially on timbre and instrumental combinations to build contrasting colors. In some instances, many instruments are grouped into the same register with symmetrical and asymmetrical rhythmic patterns overlapping. These create a subtle form of confusion, similar to currents that move on independent paths in the same body of water. I also explore dry and wet combinations of color in the orchestra. For example, a high sustained melody accompanied by fragmented rhythmic motives in short articulation. Wet and dry will be discussed further in Part II. The piece ends with the image of everlasting water- water that quenches thirst eternally and need not be consumed again and again. The final melody in the violins is meant to leave the listener with the sense of peace and fulfillment the text from John's Gospel describes.

PART II

Complete Analysis of *As Lightning Flashes*

Please refer to the score in Appendix A.

2.1 Structure

As Lightning Flashes has a fantasia-like form. Each section leads into the next with little exact repetition of material. The opening features flowing modal melodies in the English horn and violas supported by sustained notes in horns and clarinet (m. 1-30). The material then becomes more shadowy, featuring similar rhythmic motives, but a tenser, more chromatic accompanying harmony and melody (m. 31-39). There is then a brief return to the opening material as the dynamic builds and more instruments are added to the texture (m. 40-55). Rehearsal letter D, beginning in m. 56, initiates a crescendo of motives in the woodwinds and brass, which they pass to harp and strings in rehearsal letter E. This section has a similar melodic shape to the opening, but is now accompanied by active violin passages. The activity of the section continues to build with the addition of articulated 16th note patterns in flutes, oboes, and trumpets (m. 81-84). This gives way to the first climax of the piece in which the brass section has a very slow melody (Figure 2.1), much like a *cantus firmus,*[5] accompanied by rapid detaché violin figures (m. 85). The melody is like a newly-composed *cantus firmus* in several ways. First, it is composed of only 8 pitches with limited contour and controlled leaps, much like those employed in the Medieval and Renaissance eras. Secondly, the melody serves a melodic, harmonic, and structural

[5] *cantus firmus* is Latin for "fixed melody". Throughout the Medieval and Renaissance Eras these tunes, either preexisting or newly-composed, functioned as the foundational unit for many sacred and secular compositions.

function, as did many such historical tunes used. The final reason the term can be justly applied, is that I composed the melody with a fragment of scriptural text in mind, another traditional approach employed by monks and composers of *cantus firmi*. The section continues to expand to the first *tutti* climaxing in m. 113 with a heavy triplet melody in brass, low woodwinds, and timpani, accompanied by even more ferocious string passages now expanded to viola and cello, as well as violins. In m. 116, all the treble instruments play chromatic, cadenza-like passages in their highest registers, finally landing on a triple-*forte* chord in m. 123. This loudest moment of the piece is followed by brief silence and then the quietest moment of the piece. Muted strings and harp enter playing triple-*piano* to set the tone for a haunting violin solo. This is the last big division in the piece; from the violin solo onward the piece builds gradually. The *tutti* at the end of the piece again features the brass playing a slow melody under high, agile runs in the treble instruments, coming together briefly in m. 170 and m. 172, and then finally in m. 173.

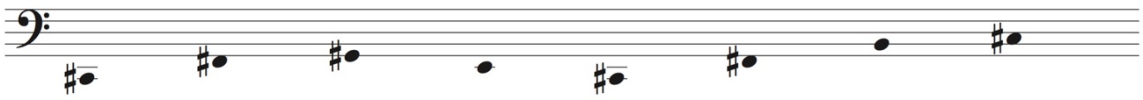


Figure 2.1: Slow-moving melody in tuba and low strings (m. 94).

2.2 Pitch and Harmonic Language

The pitch language for *As Lightning* is primarily modal. The opening material, shown in Figure 2.3b**,** is primarily in D Lydian. Melodies are transposed to different scale degrees within the mode, but the melodic material remains solidly in D Lydian. The flutes play high harmonics outside the mode in order to create an other-worldly sound. The flute's chromatic pitches do not detract from the mode's dominance,

because theirs is a subtle, timbral role. I chose the mode completely intuitively and moved melodies into different scale degrees within the mode to keep the sound fresh. I made these decisions by recording myself and listening back to get a strong sense of pacing. This type of reflection guided the shifts of mode and the use of dissonance throughout the pieces. The pitch material used to imply light is primarily pandiatonic. Pandiatonicism is a method in which the composer makes free use of all seven pitches in a diatonic scale.[6] The lack of chromaticism creates a strong sense of tonality and balance. I chose this pitch language to portray light, because it is in consonant and clear– two characteristics I associate with the aural depiction of light.

Chromaticism is featured in restless and more shadowy moments of the piece, and used only in a few sections of *As Lightning.* Figure 2.2 begins in m. 30 and is the first moment in the piece that features chromaticism in the melody. The melody descends in range and is taken up by bassoons, violas, and cellos. The altered pitches– F-natural, G-natural, E-flat, and A-flat– create a darker, more ominous harmonic sound. The melodic contour beginning in m. 30, is similar to the opening, making it a lower, slightly distorted melodic relative to the opening motivic elements. The dissonance adds instability and unrest to the sound. Punctuated pitches in the low brass, also featuring chromatic pitches, further illustrate the shadow aspect of this moment. Chromatic pitches were also chosen intuitively to create contrast, depict shadow, and to give the listener rest from the diatonic, consonant material up to that point, which can be waring to the listener if over-used. I chose to employ key signatures because much of the pitch material falls within the mode at hand.

[6] Oxford Music Dictionary, Subject entry "Pandiatonicism"

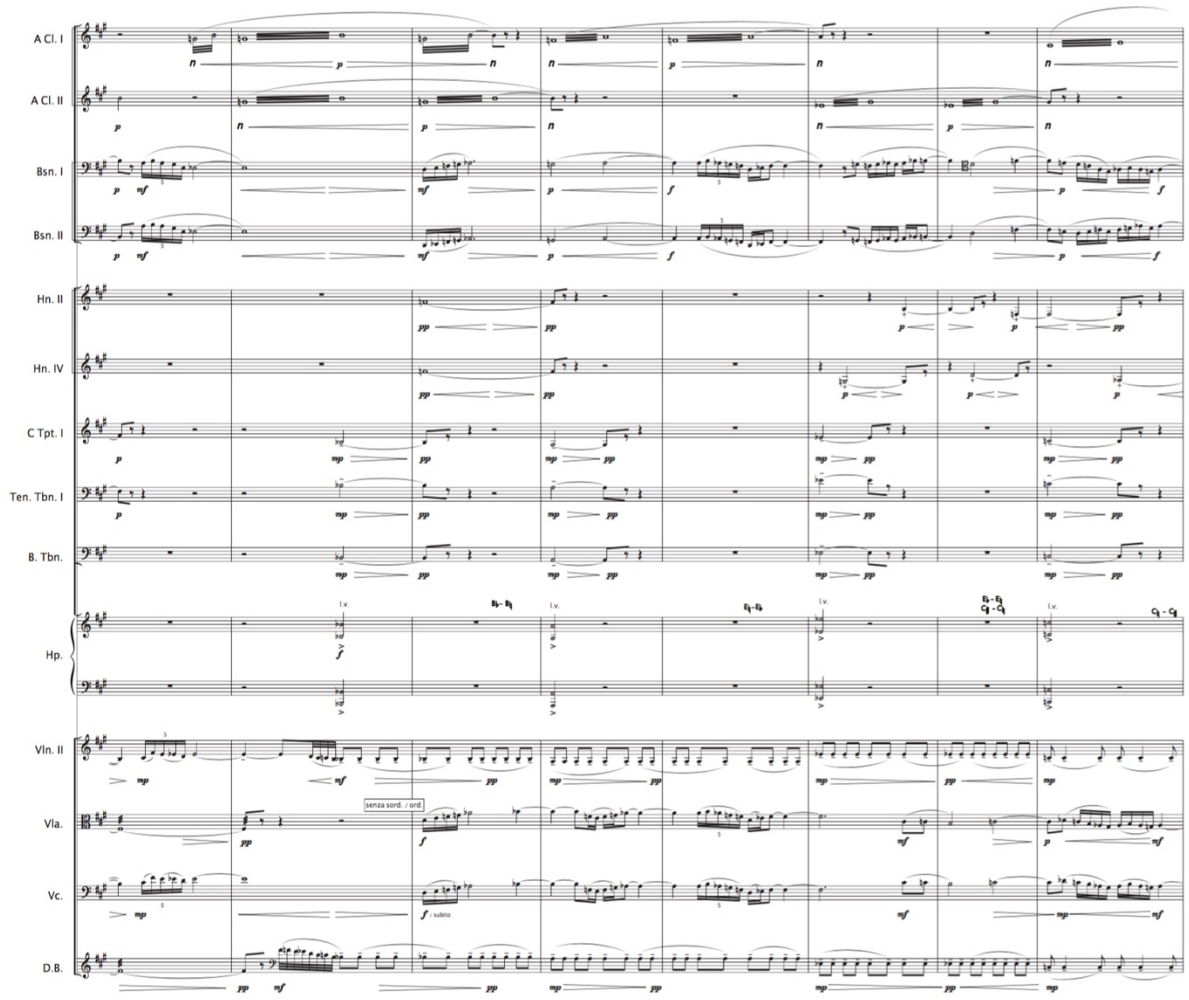


Figure 2.2: Example of chromaticism used to depict shadow (m. 30).

As regards my approach to harmony, throughout *As Lightning* the *cantus firmus* in the brass and low strings functions both as a slow melody and a harmonic support (see Figure 2.3a). Other moments in the piece are supported harmonically by pedal tones especially in the low strings and horns, an example of which is in Figure 2.3b. The only extended chordal section of the piece begins in rehearsal letter I. The progression of four chords, shown in Figure 2.3c, is repeated and expanded throughout this part of the piece**.** These chords were constructed linearly, beginning

with the outer voices. I composed each of the five voices with satisfying voice-leading horizontally. Registrally they become more compressed with each chord, the four lower voices move in close intervals, while the upper voice leaps downward in all but the last chord-change. These four harmonies were chosen improvisatorially and were altered as needed throughout the compositional process. Other significant harmonic arrivals in the piece occur on the downbeats of m. 116, m. 121, m. 170, m. 172 and m. 173. In all these instances the entire ensemble arrives and rests together for a brief moment. These harmonic arrival points occur infrequently, and so are significant moments of repose during the piece.

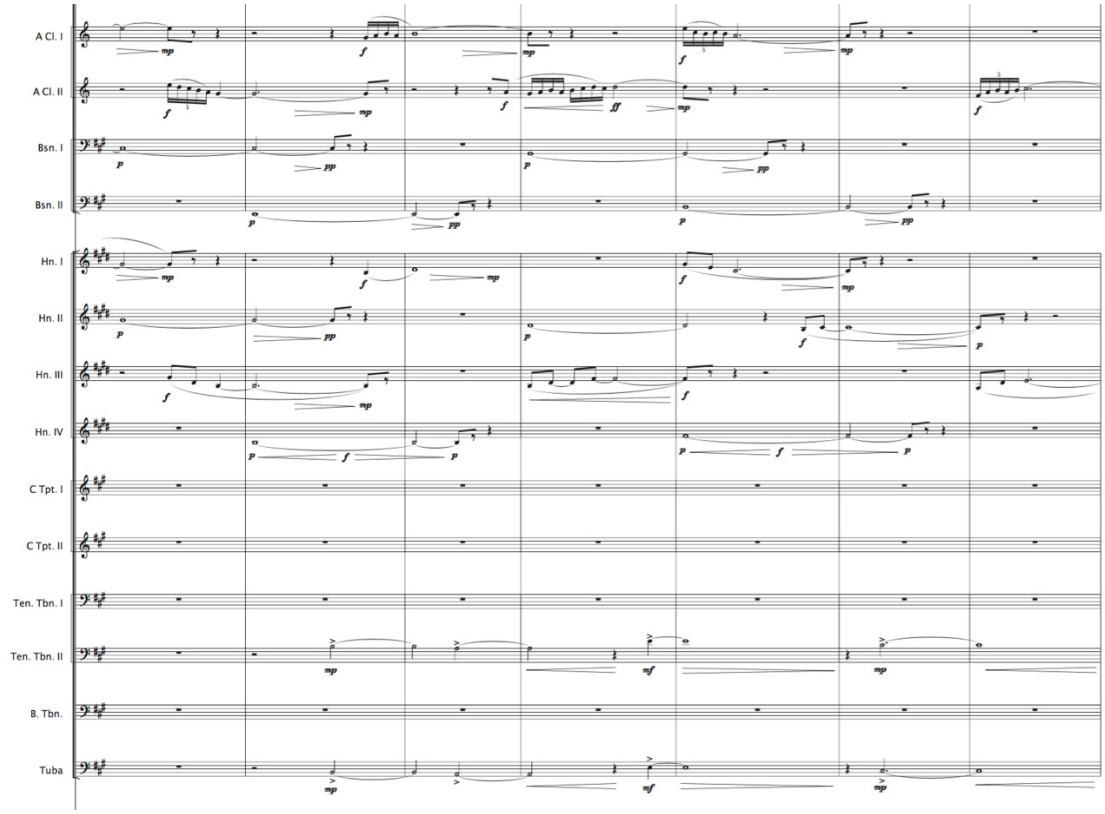


Figure 2.3a: Harmony provided by *cantus firmus* in bass voices.

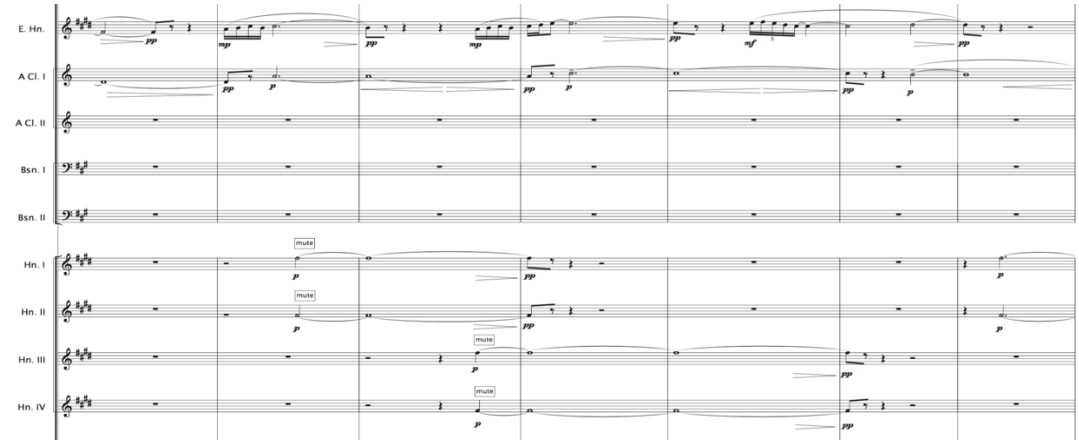


Figure 2.3b: Harmonic support provided by a pedal tone in the horns.

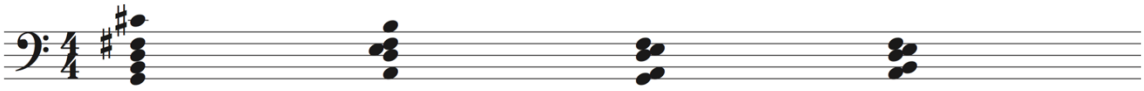


Figure 2.3c: Harmonic progression underlying violin solo at I, m. 124.

2.4 Registral Narrative

When I set out to write *As Lightning Flashes*, I made a detailed plan of how I wanted the registral narrative to develop (see Figure 1.5). This was more difficult to implement than I anticipated. I was inclined to use much of the orchestra's range throughout the composition causing the full sound of the orchestra to be monotonous. In response to this realization, I purposefully orchestrated sections where instruments were grouped into the same register so that more expanded registral moments would sound fresh. This occurs recognizably in several places. Figure 2.4a shows one example of closely orchestrated writing. The strings and harp are grouped into the same register to create a homogenous, sustained padding. The harp adds impetus to the entrance of each string note. These combined textures make up the

sound world that accompanies the violin solo beginning soon after this moment. The close-range effect also occurs in the opening (Figure 2.4b) where English horn, clarinet I, and violas are grouped together. The soft harmonics in the flutes, while in a higher register, are delicate enough to preserve the close-range sound.

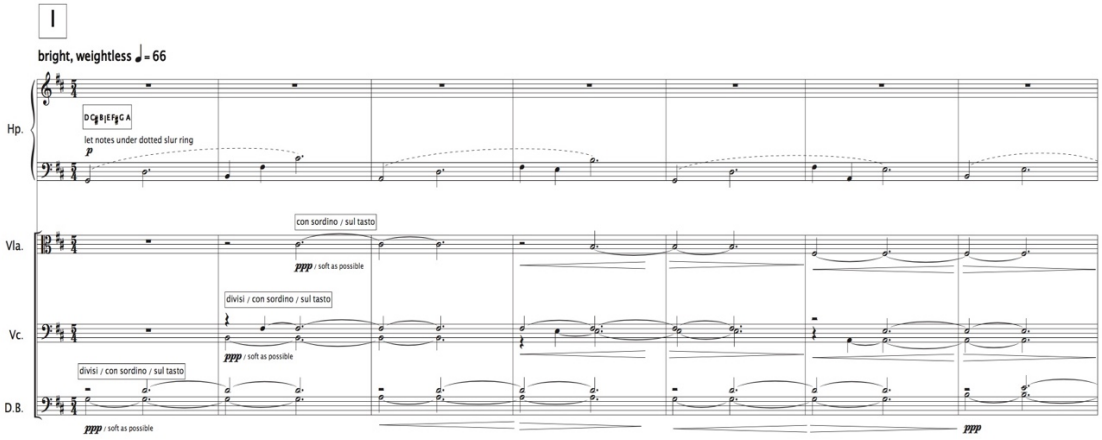


Figure 2.4a: Example of close-register orchestration.

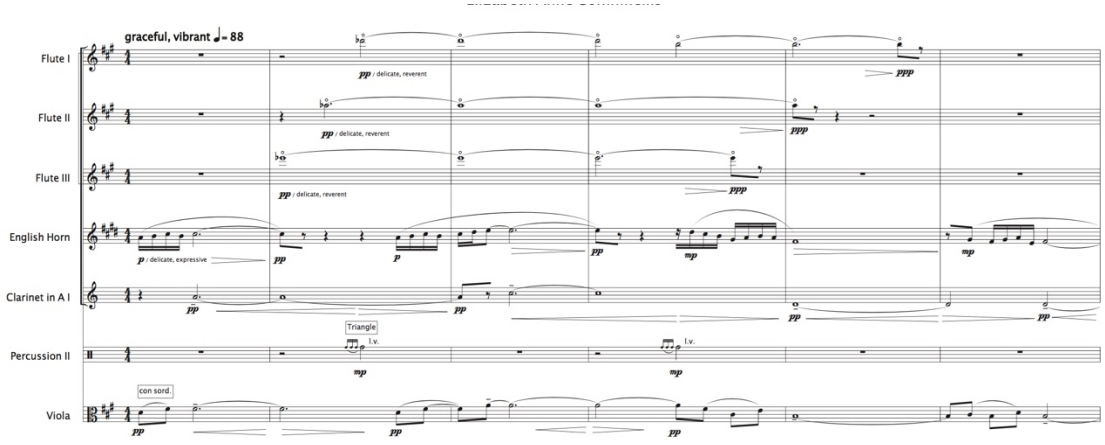


Figure 2.4b: Example of D Lydian mode and of close-register orchestration.

Another challenge of the registral plan was to write a section with only the lowest range of the ensemble. Figure 2.5 illustrates a part of the short score plan I made for the low section. In trying to orchestrate this part of the short score I found

that the instruments capable of playing in the lowest register of the piano– tuba, bass trombone, harp, low strings– all have very different timbres, dynamic capability, and agility. The homogenous sound possible in the low range of the piano could not be imitated in the orchestra in a balanced way. The low chords in the bottom stave of the short score (Figure 2.5) were especially problematic. Consequently, I chose to use a mid-low range instead. The bassoons have the melody in unison and are doubled by the cello and viola sections. The trombones, trumpet and horns sustain the harmony, but in a higher register than originally planned (rehearsal letters B and C). This section altered so drastically from both the preliminary registral plan and the short score that the result is almost irreconcilable.

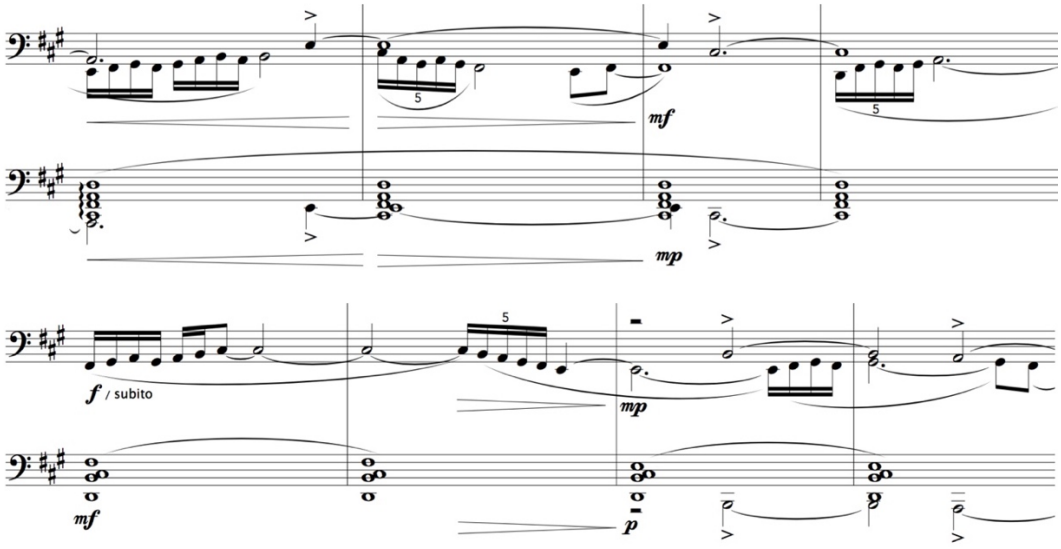


Figure 2.5: Short score for extreme low range section.

The end of the piece expands outward to cover every octave, with rapid passages in the high range and a rich melody in the low range. Balancing the bass and treble of the orchestra was a challenge. In the premiere performance, I noticed that

only certain notes or bits of the high passages emerged clearly out of the texture, while the low and mid-range instruments dominated the collective sound. The ending is less buoyant than I first imagined, and yet contains the finality and excitement necessary to persuasively end the work. The moment of the initial registral plan that is realized most successfully is high point of *As Lightning* (Figure 2.6), which corresponds to letter J in the graphic plan (Figure 1.4). It functions as an intense, grating climax before the most serene moment in the piece (m. 124).

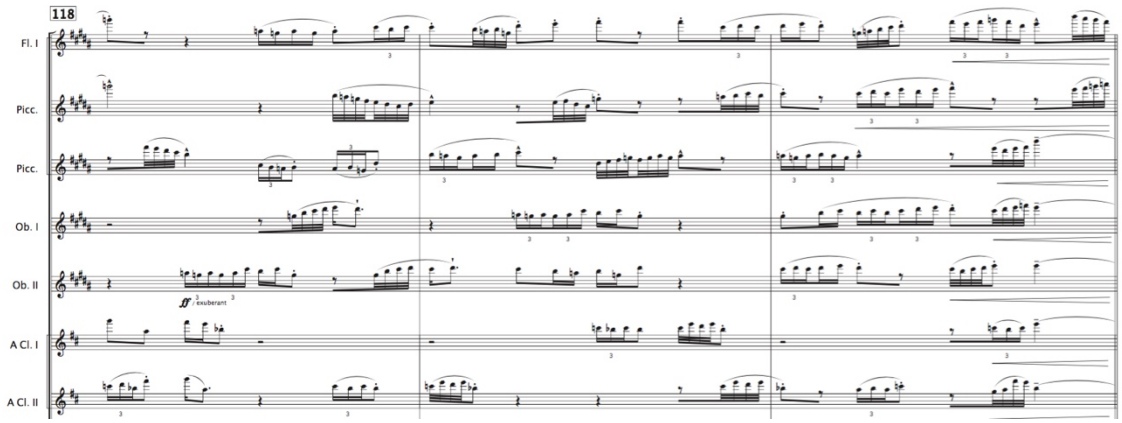


Figure 2.6: the high point of *As Lightning Flashes.*

2.5 Light and Shadow

Light and shadow is the primary philosophical contrast I envisioned while composing *As Lightning*. I imagined a landscape at night where nothing is clearly visible. A flash of lightning illuminates everything for a moment- like a spotlight on the world, which is quickly removed. I imagine there is tension and unease when everything is black, and musically these are the shadowy moments, moments where depth and dissonance are paramount in the texture. The most notable of these is rehearsal letter B, which is described as “heavy, dark”. The low melody is punctuated

with brief, sharp entrances by the low brass (m. 30-39). Section H, while very high in register, is also a shadow section because it is highly chromatic and unsettling. Sections D and E are examples of triumphantly light moments (m. 56-79), which are rhythmically active, harmonically bright, and have a forward, sweeping motion. Rehearsal letters I and J portray a different kind of light, light characterized by serenity and purity (m. 124-156).

PART III

Complete Analysis of *As Water Quenches*

Please refer to the score in Appendix B.

3.1 Structure

There are two primary section-types that occur throughout *As Water* and function as structurally unifying features. Figure 3.1 is a dissection of when and how often each section appears during the piece.

Measure #'s	Description of Material
m. 1-19	**"well" melody** in cl. and cel.
m. 20-47	1st **additive water** section, **"well" melody** in tpt.
m. 48-52	transition
m. 52-86	**"well" melody** in ob. and chimes, dry/wet combination
m. 87-149	2nd **additive water** section, chordal, builds to 1st *tutti*
m. 150-153	transition
m. 154-182	simple bass melody, low hp. accents, and vln. solos
m. 183-267	3rd **additive water** section, chordal, virtuosic solos, builds to 2nd *tutti*
m. 268-284	water gestures with hp., cel., vln. solos, D.B. high harmonics
m. 285-300	**"well" melody** in Eng. Hn.
m. 301-310	coda, **resolution of "well" melody** in divisi vlns.

Figure 3.1: Structural analysis of *As Water Quenches.*

The first section-type highlights the "well" melody, which occurs four times in the piece, each time played by a different instrument, in a different mode, and surrounded by a different type of accompaniment. The well melody is presented in lengthening fragments each time it appears, aided by the imagined text I employed to

compose the tune. The culmination of that melody occurs only in the final section, played by *divisi*[7] violins. In every other entrance the melody is incomplete. This melodic conclusion is intended to illustrate the fulfilling promise in the text from John 4:4. Figure 3.2a shows the complete "well" melody in unembellished form with the accompanying text. However, in the context of the piece the well melody is greatly embellished and is revealed in elongated bits. Figure 3.2b illustrates the "well" melody as it is conveyed within the context of the piece. The accompanying text is also included to help reconcile the two versions. The culmination of the melody, which occurs in the final bars of the piece is shown in Figure 3.2c.

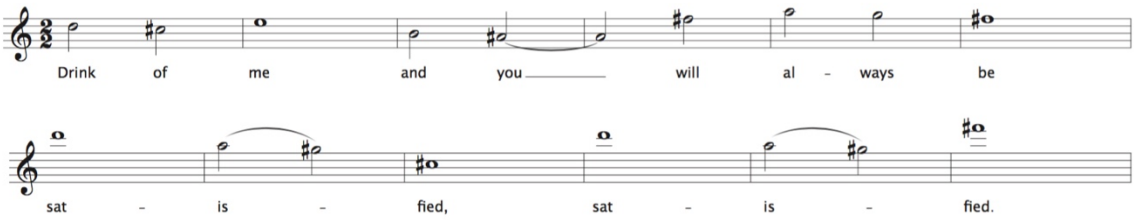


Figure 3.2a: Unembellished "well" melody

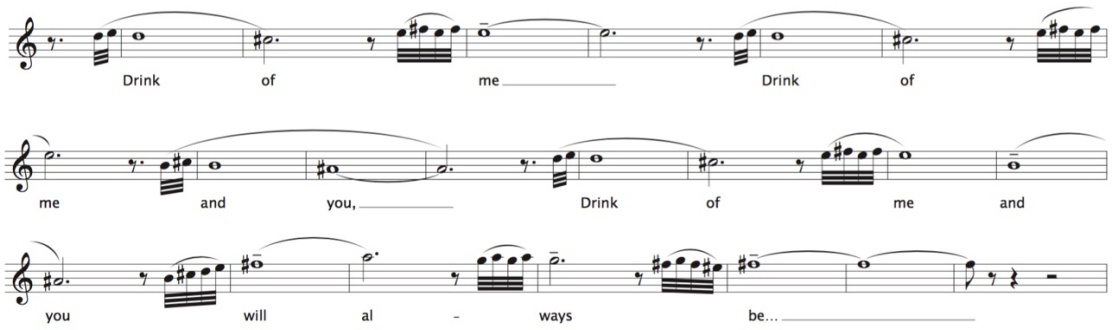


Figure 3.2b: Embellished "well" melody

[7] Musical term instructs players to separate a single part into two or more parts

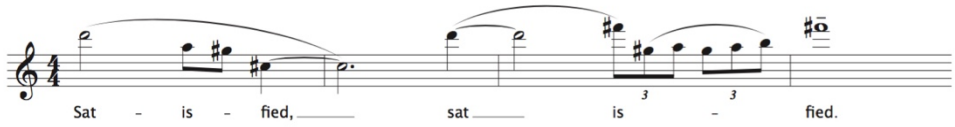


Figure 3.2c: culmination of the “well” melody (m. 301-310) in violins.

The other section-type is the “additive water” type. There are three such segments, all of which begin with a single instrument or a small group of instruments and build, one layer at a time, to include the entire or most of the ensemble. I approached each of these sections differently from an orchestral standpoint, but structurally all three start small with a few instruments and build to include the full orchestra in a mass of overlapping textures. Figure 3.3 shows a simplified version of the “additive water” portion that occurs between m. 20 and m. 47. It shows each individual entrance to illustrate how the texture becomes gradually denser.

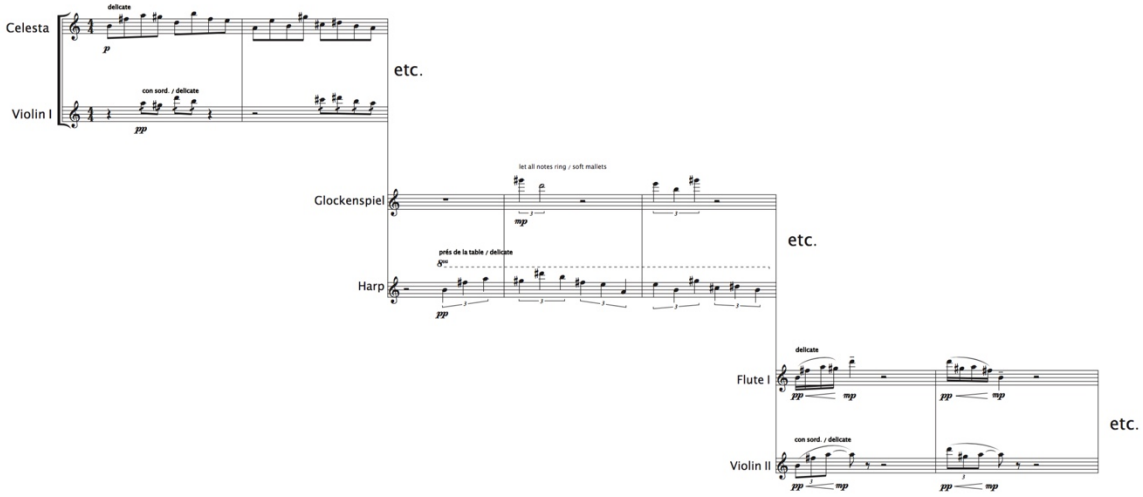


Figure 3.3: Example of “Additive Water” section-type.

The two section-types encompass most of the piece with two exceptions. The first, from m. 154-182, follows the first additive water section, which peaks with the

first orchestral *tutti*. It is a quiet moment that features low strings and bass notes in the harp, and solo violins. The second, from m. 268-284, follows the final additive water section and the second and final *tutti*. This section is also quiet, but with a watery, indistinct character created by a combination of harp, celesta and violins. The piece ends with a peaceful *coda* in the violins, which concludes the "well" melody for the first and only time.

3.2 Pitch and Harmonic Language

Similar to *As Lightning*, the pitch language in *As Water* is primarily modal, though I experimented with voices in different modes concurrently to show independence. The opening "well" melody, from m. 1 to 19, in B-flat clarinet, celesta, and bowed crystal glasses is essentially in E major. The initial "additive water" section, beginning in m. 20, carries the opening pitch material forward, yet wide leaps and the independence of voices give it a distinctively pandiatonic sound. The first modal shift occurs at rehearsal letter B, in m. 53, where the melody is in A, but the dry textures in the strings surrounding it are freely chromatic, creating a sense of bi-tonality. However, it is not strict bi-tonality in that the strings are not in any mode precisely. The chromatic pitches were written with interval and contour in mind, in order to highlight large angular leaps; the harmony that occurs, therefore, is incidental. I used chromaticism to bring out the dry/wet contrast, an example of which is shown in Figure 3.5. The "dry" voices in the texture feature chromatic gestures to interrupt the tranquility of the diatonic melody. Another section that features a form of bi-tonality occurs between m. 183-237. The underlying harmony is made up of triads and seventh chords (Figure 3.4a), while the soloistic melodies above weave through the harmonically sustained texture in contrasting and

frequently altering modes. Sections that feature the "well" melody, by contrast, are unified by a single mode, and are primarily diatonic and consonant.

Each additive water section is built on a chord progression, which serves as the harmonic foundation for that section. These progressions provide much of the harmonic framework for the piece. Two of these progressions are presented chordally, m. 87-149 and m. 183-267. The first progression, shown in Figure 3.4a**,** is made up of triads and seventh chords. The progression is cycled through many times, beginning with only a few instruments and the texture builds in volume and intensity with each iteration of the progression. The second chordal section, from m. 183-267, is a progression of ten chords shown in Figure 3.4b. It advances very slowly over the section, often fluctuating between two chords for several measures before moving forward in the progression. The culminating chord of the progression, in contrast to the other harmonies, occurs once at the end of the section. I chose five-note and six-note chords in this part of the piece to make the foundational four-note chords sound slightly blurred. In other places chords are broken up into distinct rhythmic patterns, which are layered over the course of the section, as in m. 26-47 (Figure 3.4c). There is also a progression that accompanies the well melody (Figure 3.4d), which is primarily composed of diminished seventh chords with an additional coloristic pitch. Sections between m. 52-86 and m. 268-284 are written linearly, with the focus on gesture and contour of line instead of chord progression. The harmony in these places occurs incidentally.

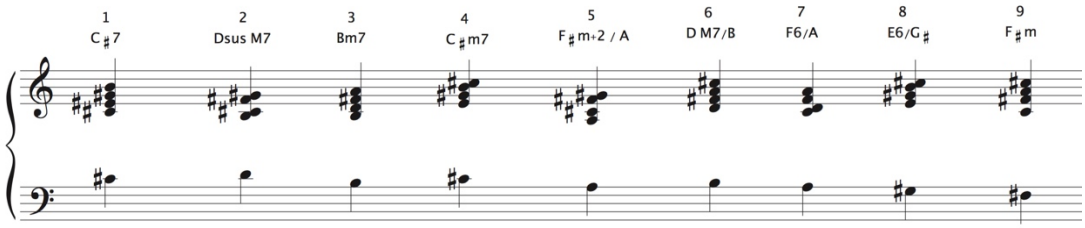


Figure 3.4a: Harmonic progression from m. 87-149.

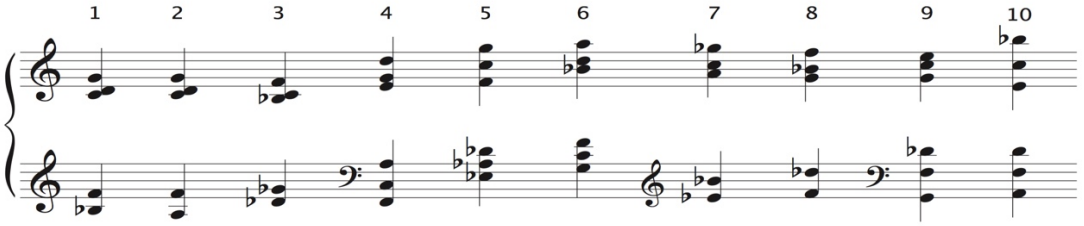


Figure 3.4b: Harmonic progression from m. 183-267.

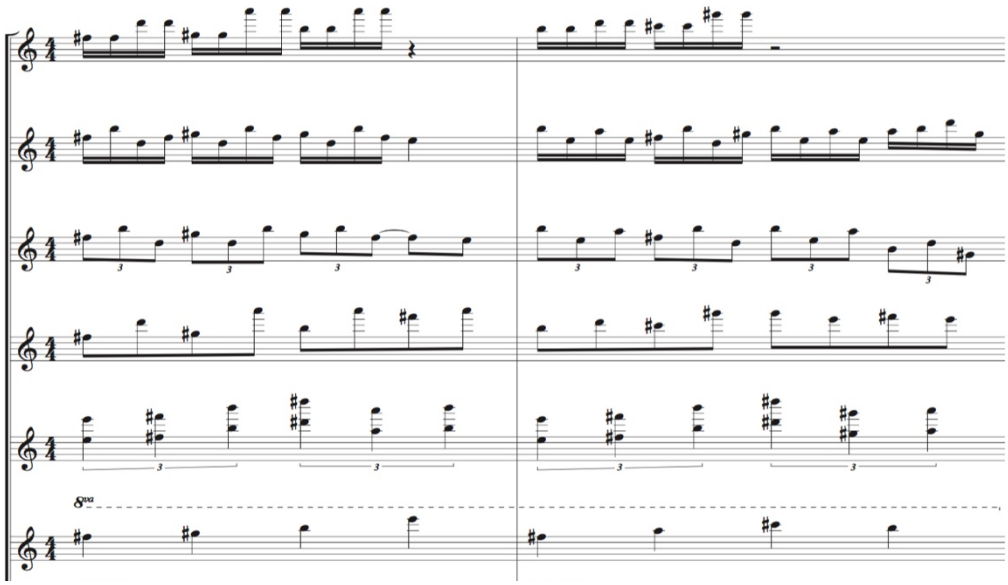


Figure 3.4c: m. 44-45, textures layered in varied rhythmic patterns.

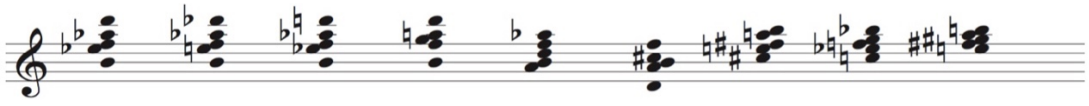


Figure 3.4d: Progression to accompany “well” melody (m. 285-300).

3.4 Wet and Dry

In *As Water Quenches* I devoted rehearsal letters B and C to combining wet and dry colors. By combining chimes and oboe (m. 52-86) I created a blurry, sustained melody to carry without break throughout these two sections. The dry aspect is created by the spiccato strings divided into many parts, which enter distinctly seven times. They are rhythmically fragmented and disjunctive. Together they create a cloud of contrasting rhythms. The mental picture I had when writing this moment is of droplets falling into a still pool. Figure 3.5 shows an instance of dry texture. This interrupts the sustained oboe and chime melody (m. 53-86).

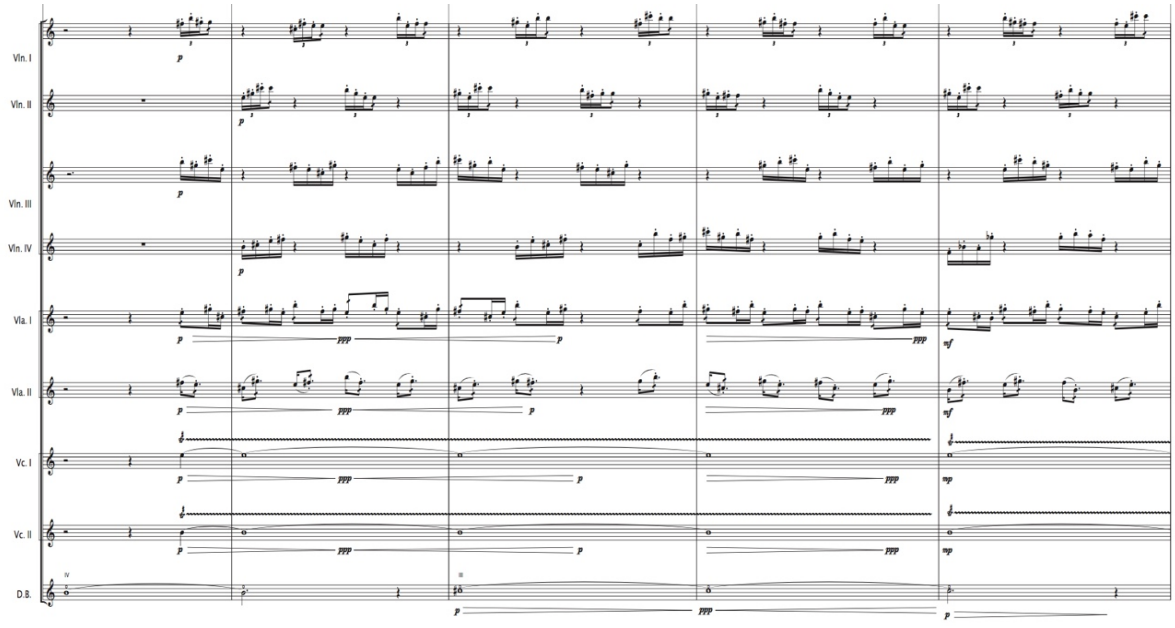


Figure 3.5: String *divisi* creating a dry texture.

3.5 Pissaro in Sound

I chose the painting *Rouen* (1898)[8], by impressionist Camille Pisarro (1830-1903) as an inspiration to help me depict water aurally. Pissarro's painting of a beautiful sunset reflected in the ocean next to a port town is achieved by many small strokes and dabs of paint. Up close the viewer looses a sense of the whole picture, it looks messy and confused, and some of the colors do not seem to match the palette of the scene. However, the work is not meant to be experienced from this close vantage. The effect from far away is harmonious and whole; it is both graceful and clear. In Pisarro's painting, the sun is glinting on the surface of the water and takes on the vibrant colors of the sky. The entire effect is silvery and united from afar, but up close you see each little place upon which the sun shines.

I thought the same effect could be achieved in sound. In *As Water Quenches* I attempted to compose detailed parts, like dabs of paint, that come together to make an interesting mass of sound. I don't intend for each individual part to be heard, but to melt into the texture. One moment where this is especially apparent begins at rehearsal letter D. The texture builds gradually to a *tutti*, each texture enters separately at intervals, but soon gets consumed into the rest of the ensemble. Portato strings enter first split into a number of *divisi* parts. The violin solo comes in from time to time with brief, wild passages. The texture continues builds with new colors and rhythmic gestures: horns in pulsed sustain, trumpets and violas in detached quarter-note triplets, clarinets in even eighth notes, celesta playing running 16th notes, and so on (m. 87-149). By the end of the section there is a polyrhythmic mass, like many strokes of paint. The effect is like an impressionist painting- many complementing textures piled on top of one another to create a beautiful whole.

[8] French term for sunset

PART IV

Unifying Elements in *As Lightning Flashes, As Water Quenches*

4.1 Fast-within-Slow

In both *As Lightning* and *As Water,* I experimented with writing music that has fast elements, but maintain a slow feel. However, I approached the method of creating a slow-within-fast feel uniquely for each work. *As Lightning Flashes* is more truly a slow composition. The tempo fluctuates between 80 beats per minute (BPM) and 66 BPM. There are several places that include fast notes (Figure 4.1), but the underlying melody is written in long note values. The slow melodic and harmonic motion underlying the fast passages creates a slow feel throughout the work.

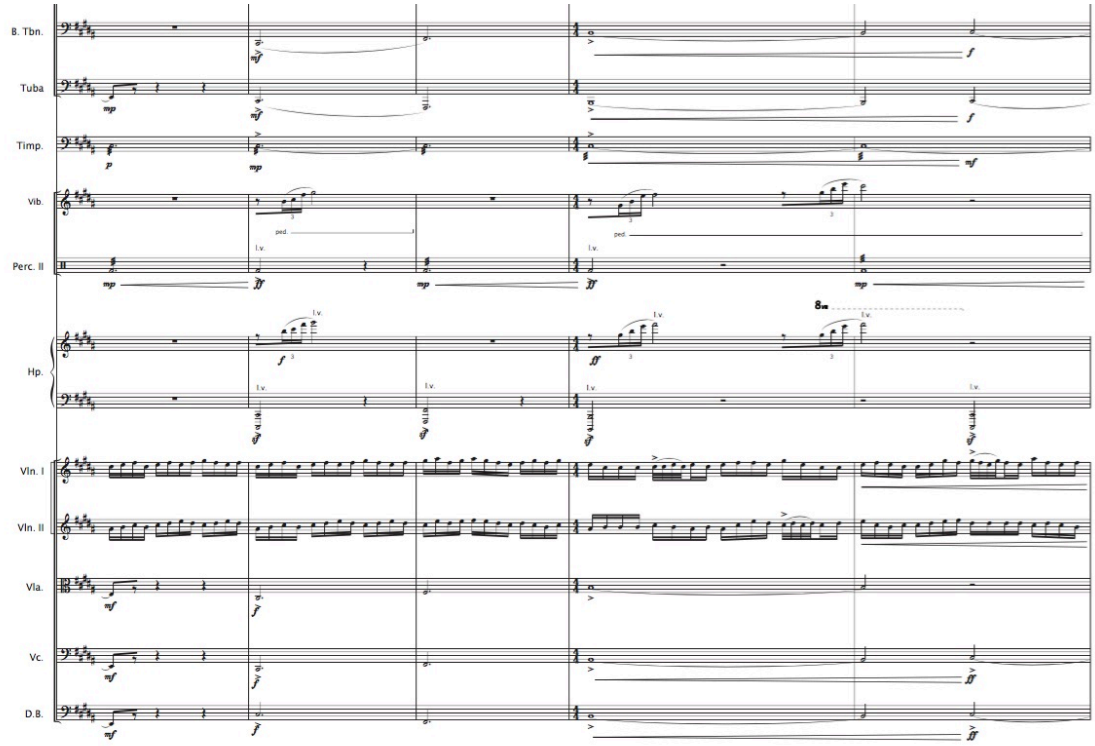


Figure 4.1: Example of fast-within-slow, slow melody with active strings.

A similar moment occurs near the end of the piece. In Figure 4.2 the strings (not pictured) and woodwinds are playing quick vibrant passages, while the trombones play another slow melody. The horns provide sustain and convey the slow rate at which the harmony changes.

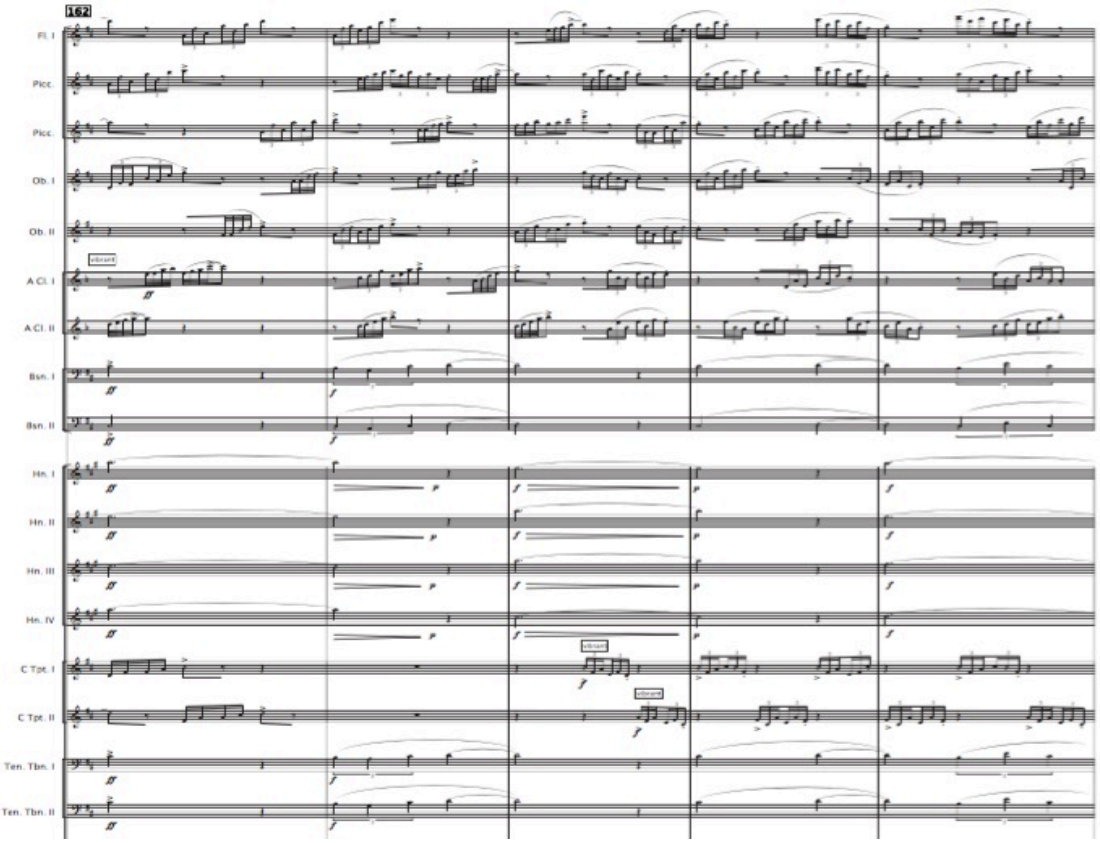


Figure 4.2: Example of fast-within-slow, slow melody with active winds.

Similarly, *As Water Quenches* has a slow feel. However, I approached the method of creating that feel differently. The tempo is fairly quick, but the material evolves gradually. In contrast to *As Lightning Flashes*, there are places where the melody is very quick, yet the serene, harmonically stable accompaniment maintains a sense of calm. In Figure 4.3 the strings underlying the melodic flourishes in violin I

are playing portato. This articulation is created when the player slightly separates each note while the bow is being moved across the string. It is a pulsed legato.[9] The solo violin adds vibrancy and shape, but is not powerful enough to overtake the simple texture created by the rest of the strings.

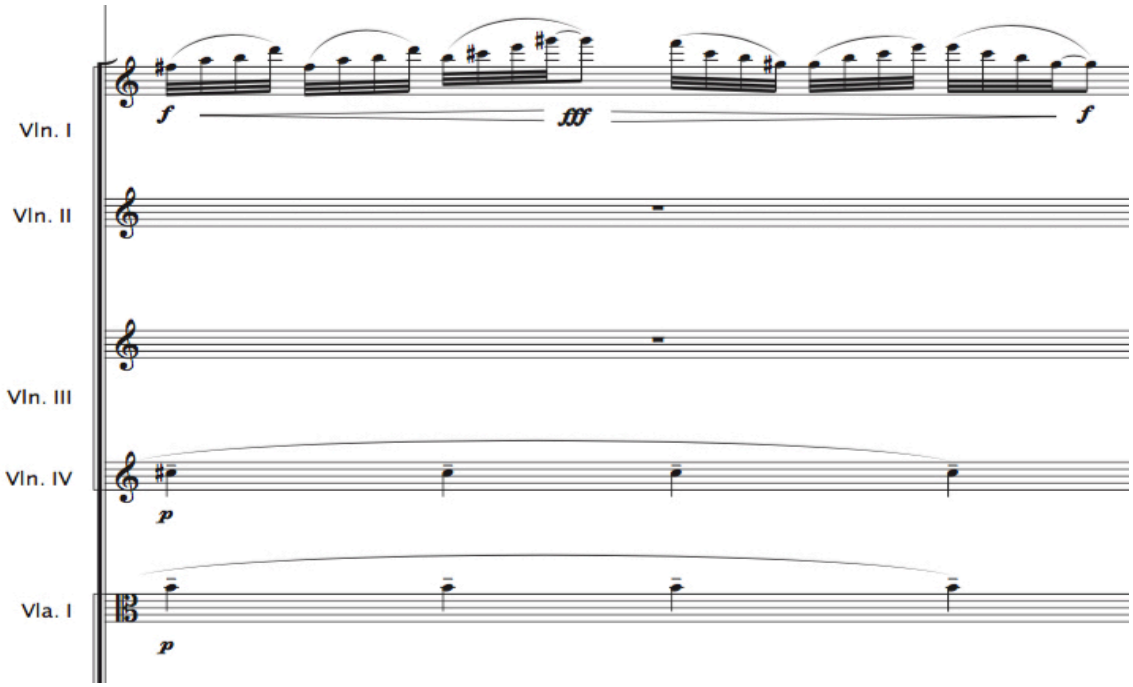


Figure 4.3: Quick melodic flourish in Violin I accompanied by strings.

Another means by which I experimented with the idea of fast-within-slow was by creating rhythmically vague watery gestures (Figures 4.4 and 4.5). They are extremely quick and even virtuosic, but are to be heard as silvery glimmers similar to ripples or currents interrupting a still pool. They are noticeable to the ear, but do not disturb the glassy surface.

[9] Adler, Study of Orchestration, p.23

Figure 4.4a, from the beginning of *As Water,* combines a very rapid celesta part with crystal glasses played by a double bass bow. The bow is drawn across the edge of the glass, which creates a sustained sound. Bowing crystal glasses also produces a fairly loud sound as compared to the softer effect of striking the glass.[10] The celesta part sounds like a sparkling layer underneath the pure tone of the glasses. Crystal glasses appear three times in *As Water.*

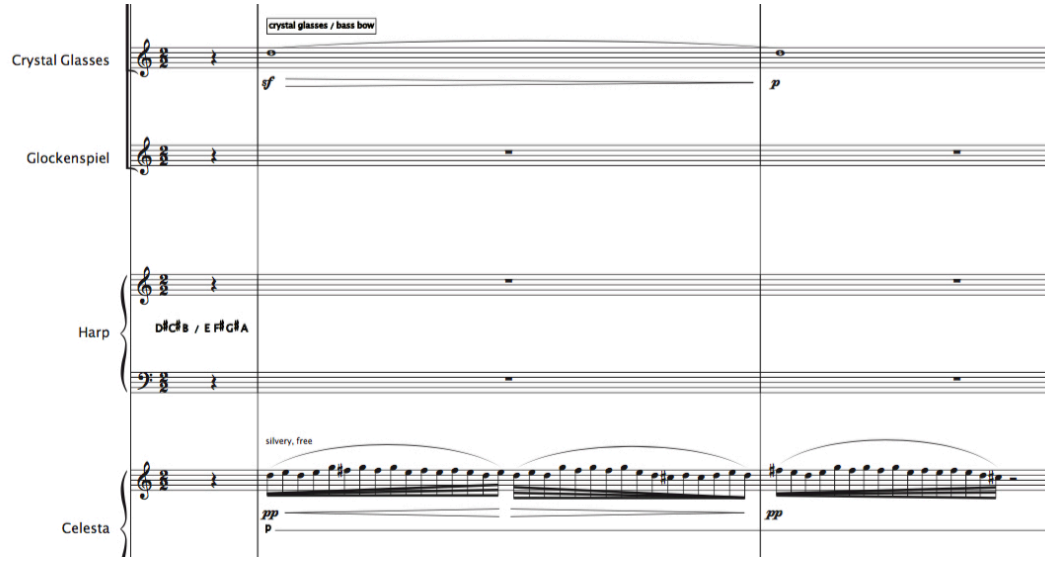


Figure 4.4: Celesta with bowed crystal glasses in *As Water Quenches.*

Figure 4.5 occurs toward the end of the piece. This watery gesture is created by combining harp and celesta. The two instruments play similar pitches in a similar contour, but the rhythms are slightly different. The harp plays 16th note triplets while the celesta plays 32nd notes. The two combined create a vague gesture. The intention is that together they sound like a single instrument.

[10] Solomon, p. 105

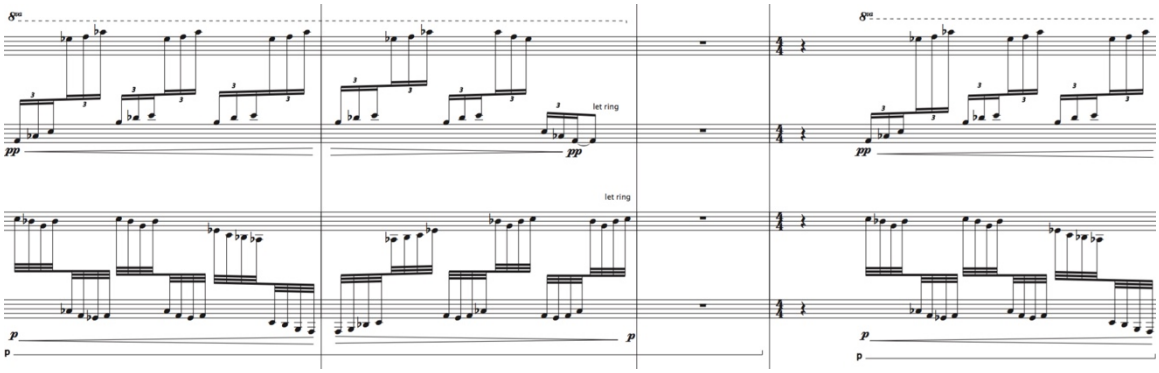


Figure 4.5: Watery gesture created by harp and celesta in *As Water.*

4.2 Descriptive Text

I am convinced of the importance descriptive words have in realizing the character of various musical elements, such as dynamics and articulation. For example, a *piano* marking in the score tells a musician to play quietly. However, quiet playing has many subtle forms and styles. The application of descriptive text to dynamics, tempo markings, and rehearsal letters gives the player more information than basic markings can communicate.

Finding the right words to express how I want a passage to sound also forces me, the composer, to think carefully about any markings I include. If I struggle to find the right description it shows that perhaps my own conceptions are too vague.

In *As Lightning Flashes*, each rehearsal mark is accompanied by descriptive text, which is included in each player's individual part. Figure 4.6 shows the descriptive text for each section. I used the same words, "serene, expansive", to characterize sections G and J in order to capture a similar tone in both. Descriptions do not necessarily point to a stark change in the sound. For example, the initial description, "graceful, vibrant", and the one that follows, "profound, tranquil", delineate only a faint change in mood.

Rhrsl.	Measure #	Descriptive Text
	1-7	Graceful, vibrant
A	8 - 30	Profound, tranquil
B	31 - 39	Heavy, dark
C	40 - 55	Delicate, powerful
D	56 - 68	Brilliant, strong
E	69 - 84	Hopeful, vibrant
F	85 - 93	Joyful, buoyant
G	94 - 115	Serene, expansive
H	116 -123	Chaotic, like a broken music box
I	124 - 143	Bright, weightless
J	144 - 150	Serene, expansive
K	151 - 157	With growing intensity and anticipation
L	158 - 175	Joyful, reckless abandon

Figure 4.6: Table of descriptive words in *As Lightning Flashes.*

Throughout *As Lightning* and *As Water* I included additional descriptive text in specific instrumental parts, especially when I desired that instrument to have a color apart from the whole ensemble. Specific descriptions are also included in solo passages. Figure 4.7 shows both instances of descriptive words use. The solo English horn is marked, “passionate, pleading”. The accompanying flutes are marked, “almost inaudible”.

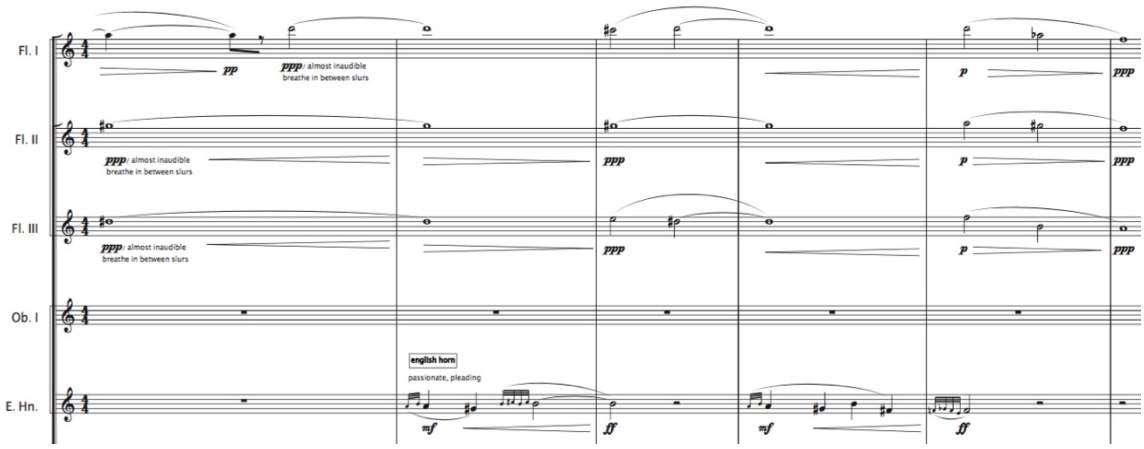


Figure 4.7: Example of descriptive word use in *As Water Quenches.*

4.3 Color Combinations

Throughout both *As Lightning Flashes* and *As Water Quenches*, I attempted to combine instruments to create an interesting sound-world. This occurs notably in several places throughout the collective score.

In Section B of *As Water Quenches*, the solo oboe melody is doubled by chimes. The chimes part re-articulates sustained notes intermittently, but is otherwise a nearly exact doubling. The chimes provide an unfocused, reverberant sound that takes the edge off the oboe's otherwise sharp, pinched sound.

Rehearsal letter I of *As Lightning Flashes* provides another example of color combination. The sustained notes in the expressive violin solo are accented by plucked harp and sustained by vibraphone played with a bass bow. The added vibraphone and harp add color the sustain of the violin (Figure 4.8). The harp provides extra impetus to the attack of the long notes while the vibraphone adds brilliancy throughout the duration of held notes. The vibraphone's addition is quite soft, but it adds a slight glint to the violin's sound.

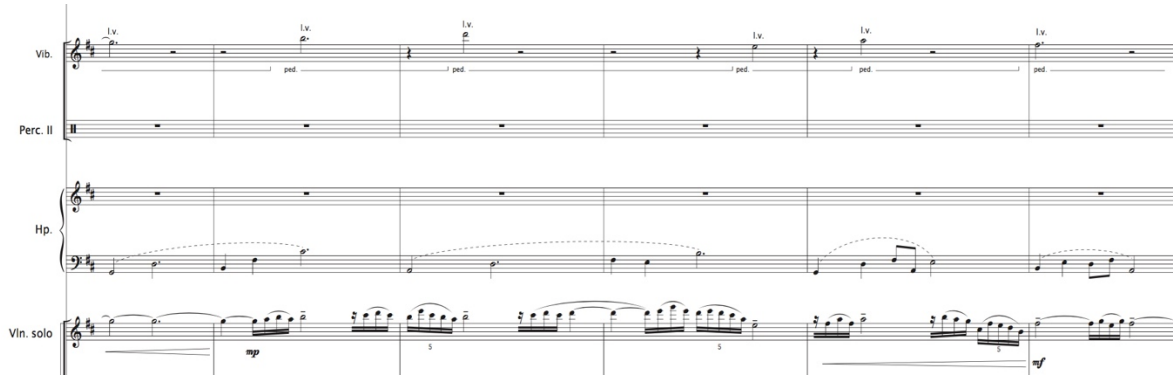


Figure 4.8: Violin solo colored by vibraphone and harp in *As Lightning.*

The combination of celesta and bowed crystal glasses has already been mentioned (see Figure 4.4). In that combination I attempted to add activity to the sustain. I think of the celesta part as a gentle motor driving the sustain forward. I find percussion instruments are especially suited to color combinations. There are hundreds of instruments in the percussion family to choose from. In many cases these instruments are less easy for listeners to recognize than the established instruments of the wind, brass and string families. Combining colors in the manner I have discussed is extremely fascinating to me. It is a sound experiment I plan to continue exploring in future work

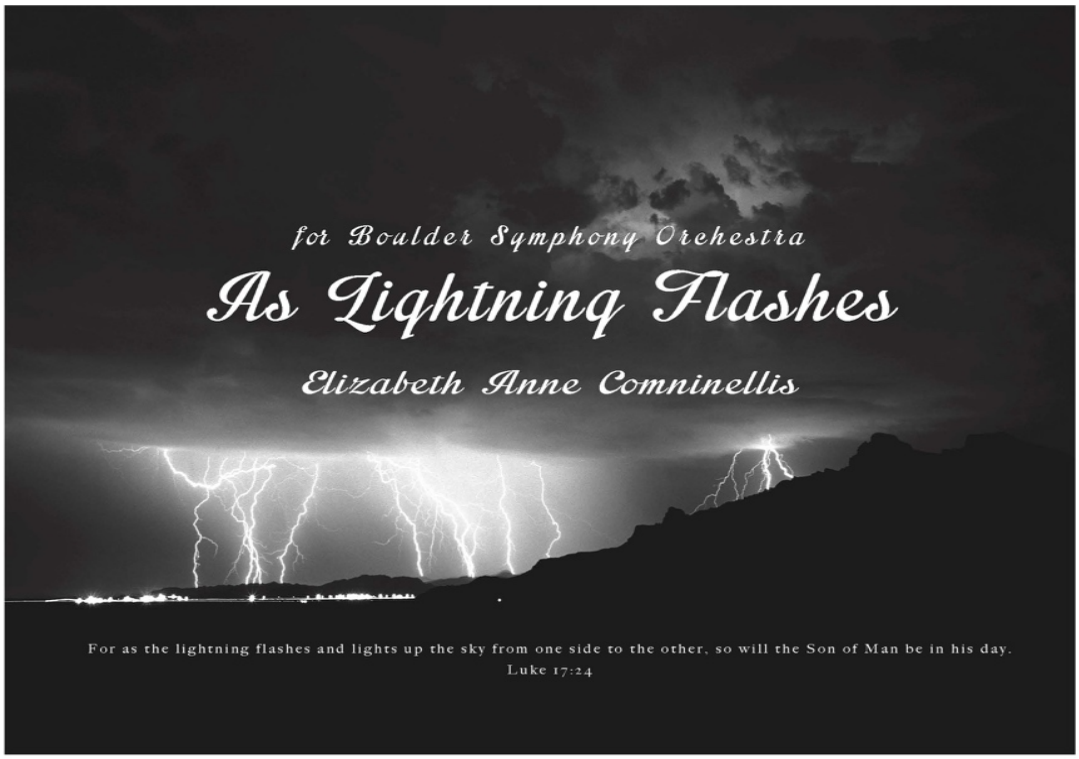
Conclusion

This project has been an incredible, enlightening experience. I see now that much of my work at UT to this point has prepared me to write effectively for orchestra. As with any creative project, I see strengths and weaknesses in the final result. In terms of orchestration, the combination of instrumental timbres, and the use of percussion are successful and add brilliance and depth to the piece. The sounds I employed to depict light, shadow, and water are also very successful. I also think that the pacing and structure of *As lightning* has a satisfying arc and is natural to the ear. *As Water* is similarly well-paced, with the exception of measures 87 to 149, this section is a bit monotonous, however, a periodic increase in harmonic rhythmic will greatly improve that moment. I plan to make this change before the premiere of *As Water.* One aspect of both pieces that I need to improve upon is the ability to write creatively for the brass section and to balance these instruments effectively with the rest of the ensemble. Before I embark on writing for brass again, I will study more contemporary music that exhibits creative and effective brass writing, as well as consult skilled brass players about extended techniques and to hear them play idiomatic passages. I have heard some spectacular quiet brass music, a difficult challenge for any composer, and one I plan to confront in my own writing. The most successful quiet brass piece that comes to mind immediately is Zhou Long's *Ancient Echoes* for wind symphony. This piece is so brilliantly orchestrated and well-balanced in its soft brass writing.

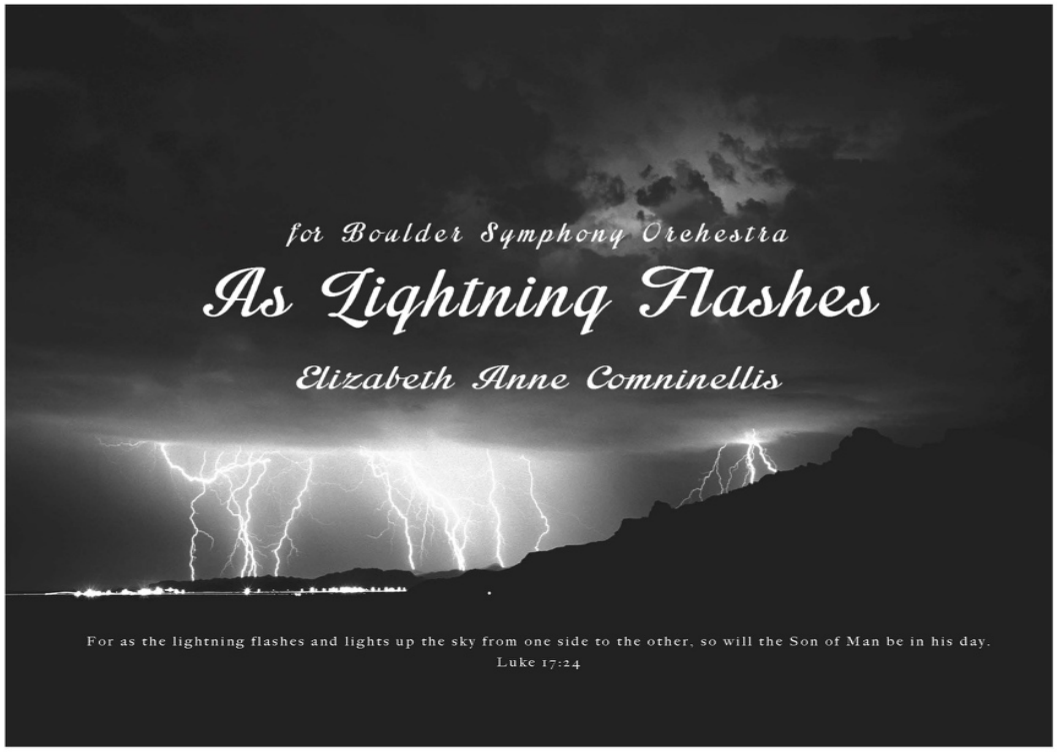
My hope going forward is to continue to grow as an orchestral writer and to seek out further opportunities to collaborate with amateur and community orchestras. I hope to continue to foster a good relationship with the Boulder

Symphony orchestra. The positive reception I received from the orchestra's board, the audience, and the orchestral players makes it likely that they will perform *As Water Quenches* during the 2018 season. We are already in discussion about the possibility. I am thankful for the opportunity they gave me to write for orchestra knowing that it will better prepare me the next project.

Appendix A: *As Lightning Flashes* Score


for Boulder Symphony Orchestra
As Lightning Flashes
Elizabeth Anne Comninellis
For as the lightning flashes and lights up the sky from one side to the other, so will the Son of Man be in his day.
Luke 17:24

Austin, 2017



Program Note

The Boulder Symphony orchestra asked me to write this piece to accompany a program entitled "Day of Reckoning". The image of that day is one of fear and judgment. It is the day when God will correct injustice and confront evil. But there is another side to the Day of Reckoning. It is the coming of Christ, the Savior. His coming represents God's pardon of sin through the sacrifice of his son Jesus. It is this side of the "Day of Reckoning" that I attempt to capture in this piece.

As Lightning Flashes refers to the description of Christ's return in theNew Testament Gospel of Luke. The writer illustrates how striking and earth-shattering that moment will be by comparing it to the natural phenomenon of lightning. Just as lightning illuminates the entire earth, making light what would otherwise be dark, so the return of Christ will do the same.

He will bring to light the beautiful and the terrible. He will end suffering and expose corruption. He will reconcile the broken and heal the hurting. In this piece I attempt to express in orchestral color the anticipation, beauty, and unsurpassed peace I imagine at the arrival of His presence.

Duration: 9 minutes

Instrumentation

3 flutes (fl. 2 & 3 double on piccolo)
2 oboes (ob. 2 double on english horn)
2 clarinets in A
2 bassoons

4 horns in F
2 trumpets in C
2 trombones
bass trombone
tuba

timpani
2 percussion:
I: vibraphone (motor off), bass drum
II: triangle, tam-tam, glockenspiel, bass drum

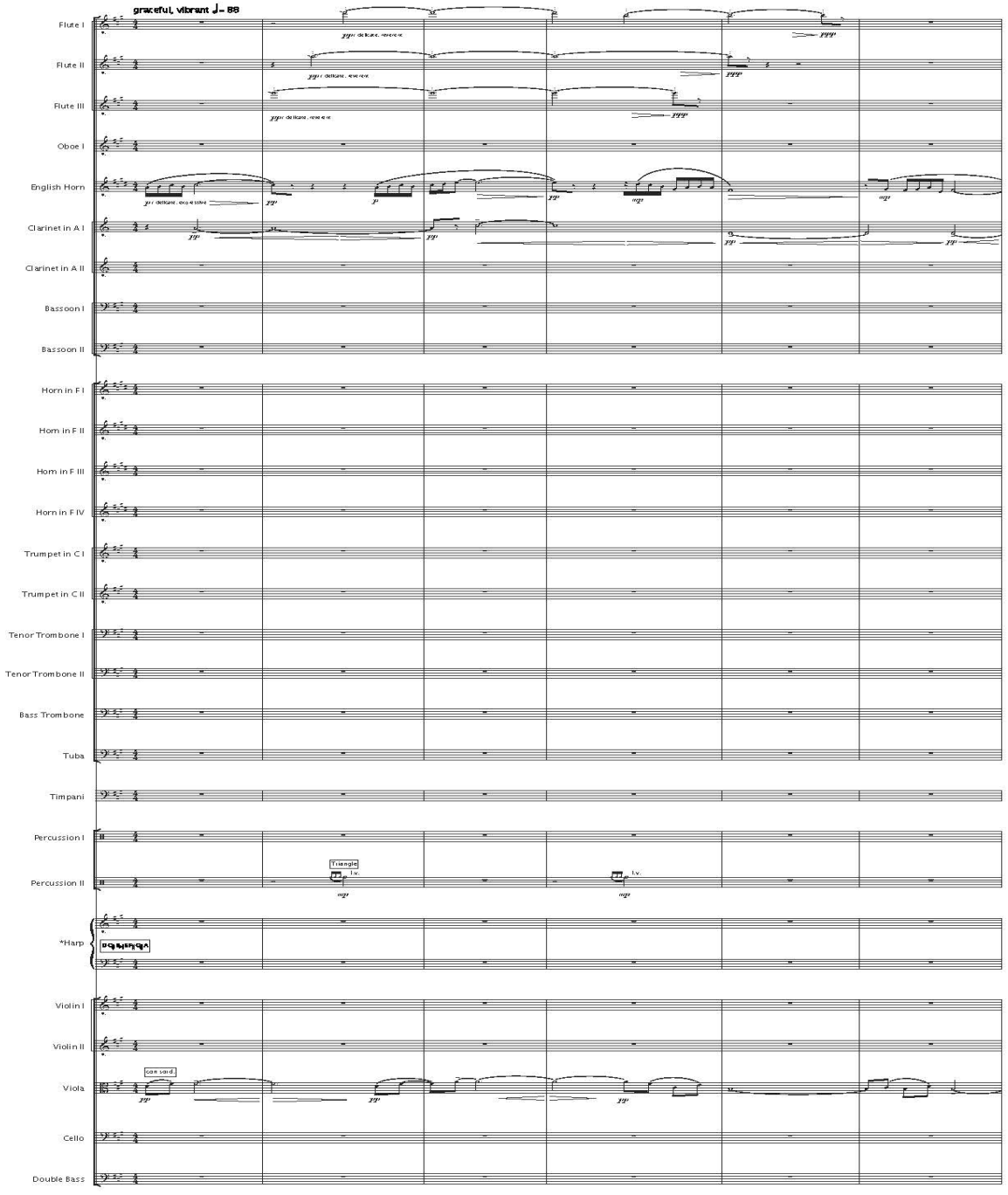
1 or 2 harps (doubling a single part)*

Violin I (12)
Violin II (12)
Viola (12)
Cellos (12)
Double Bass (8)

Transposed Score

As Lightning Flashes

Elizabeth Anne Comninellis



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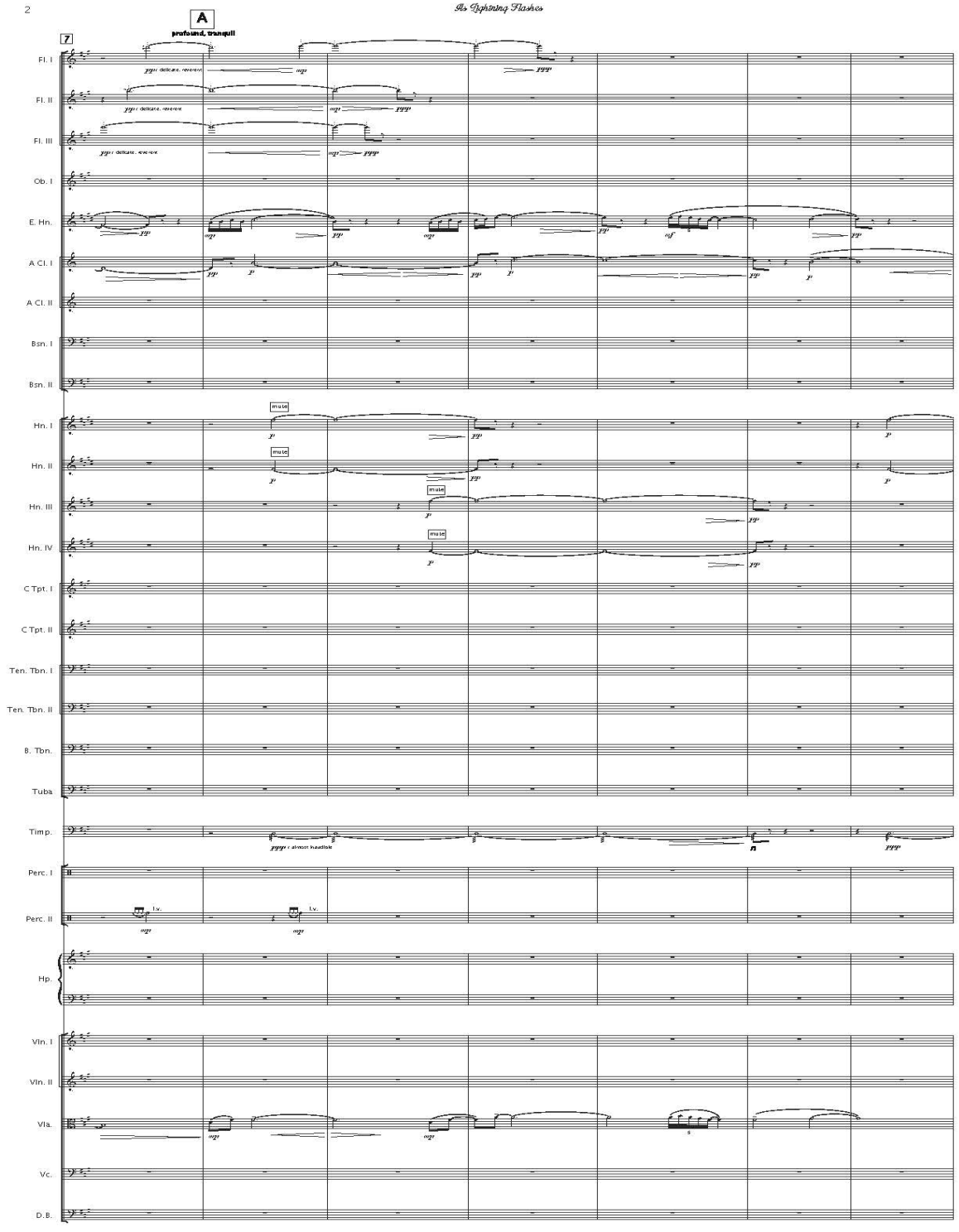
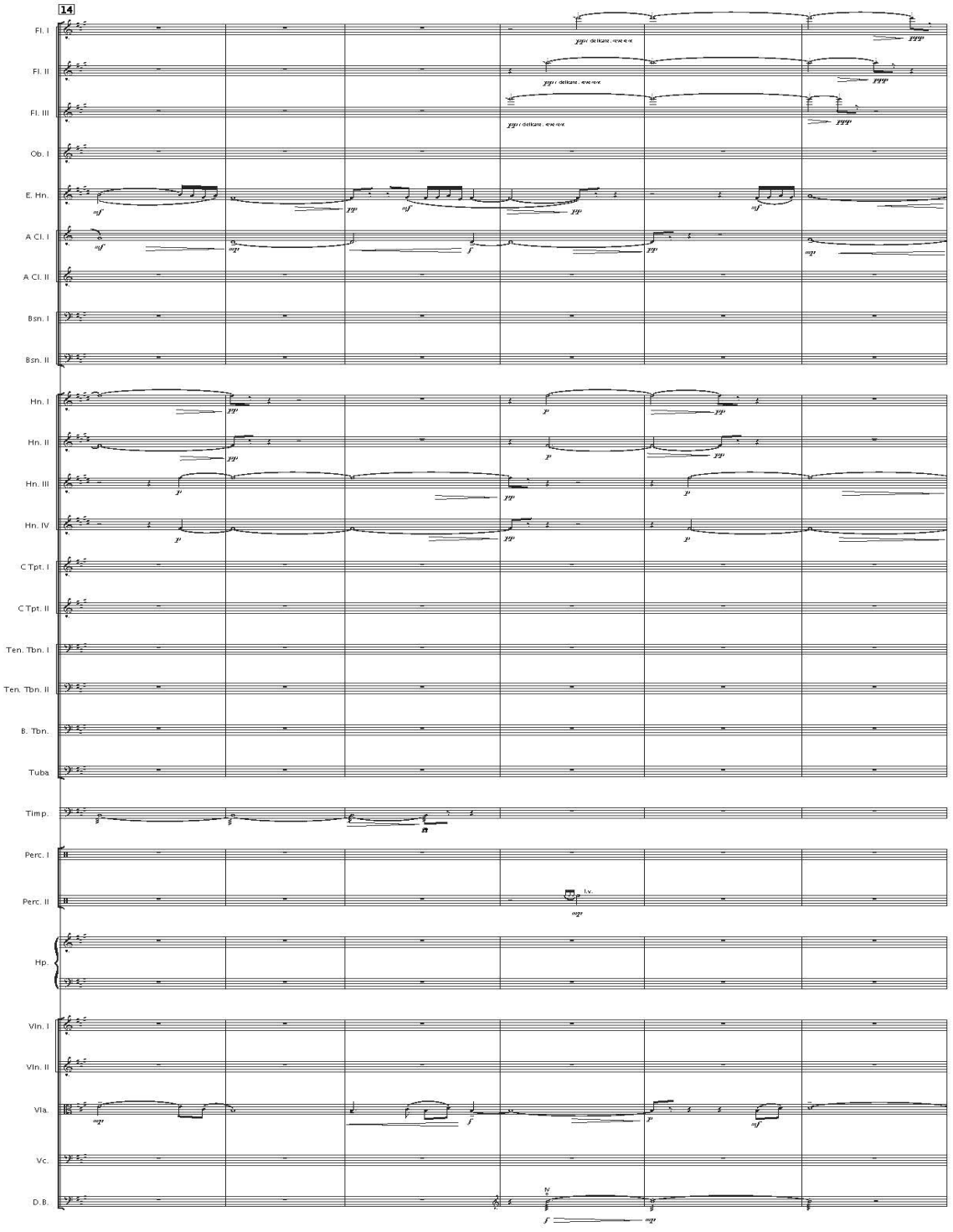
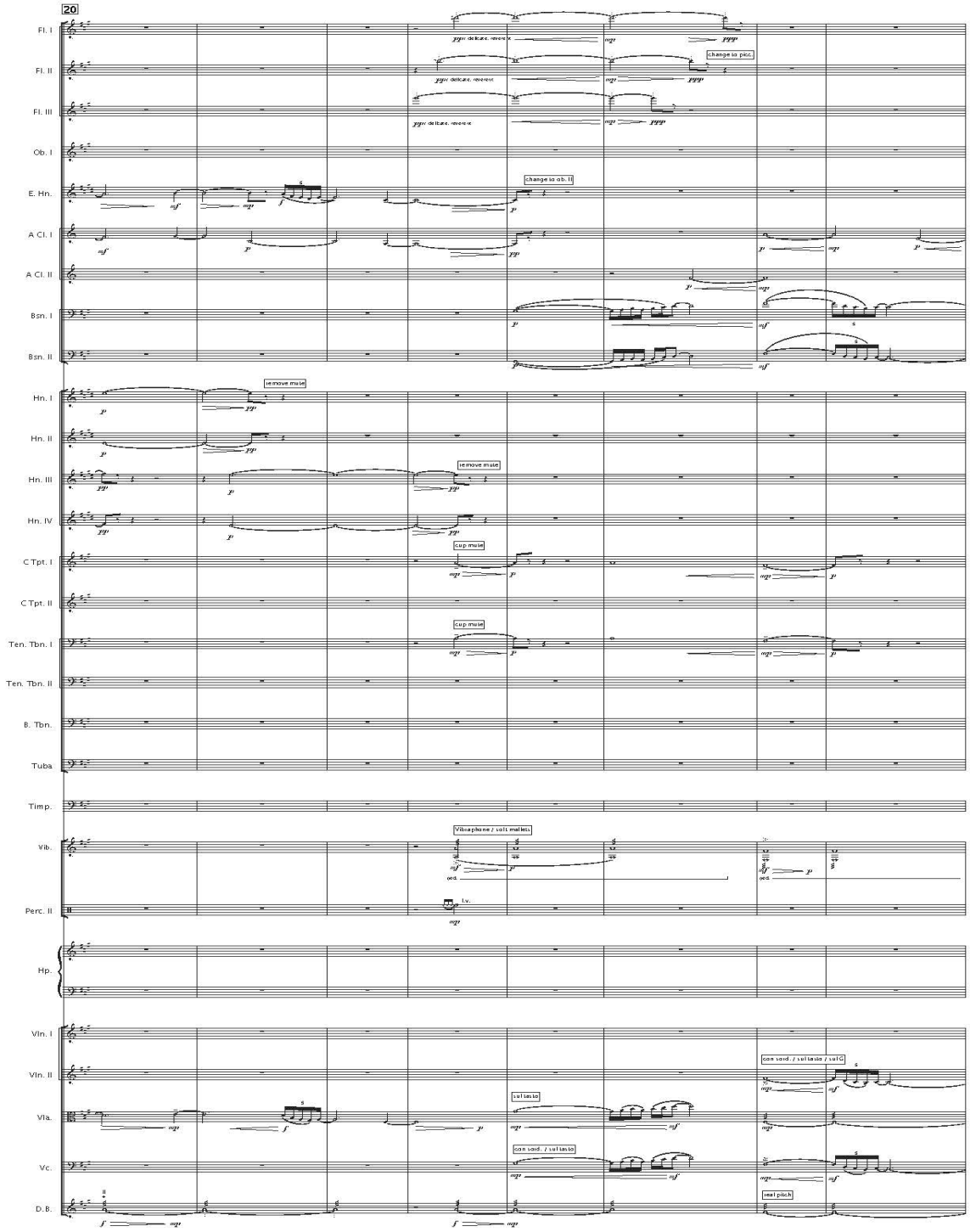
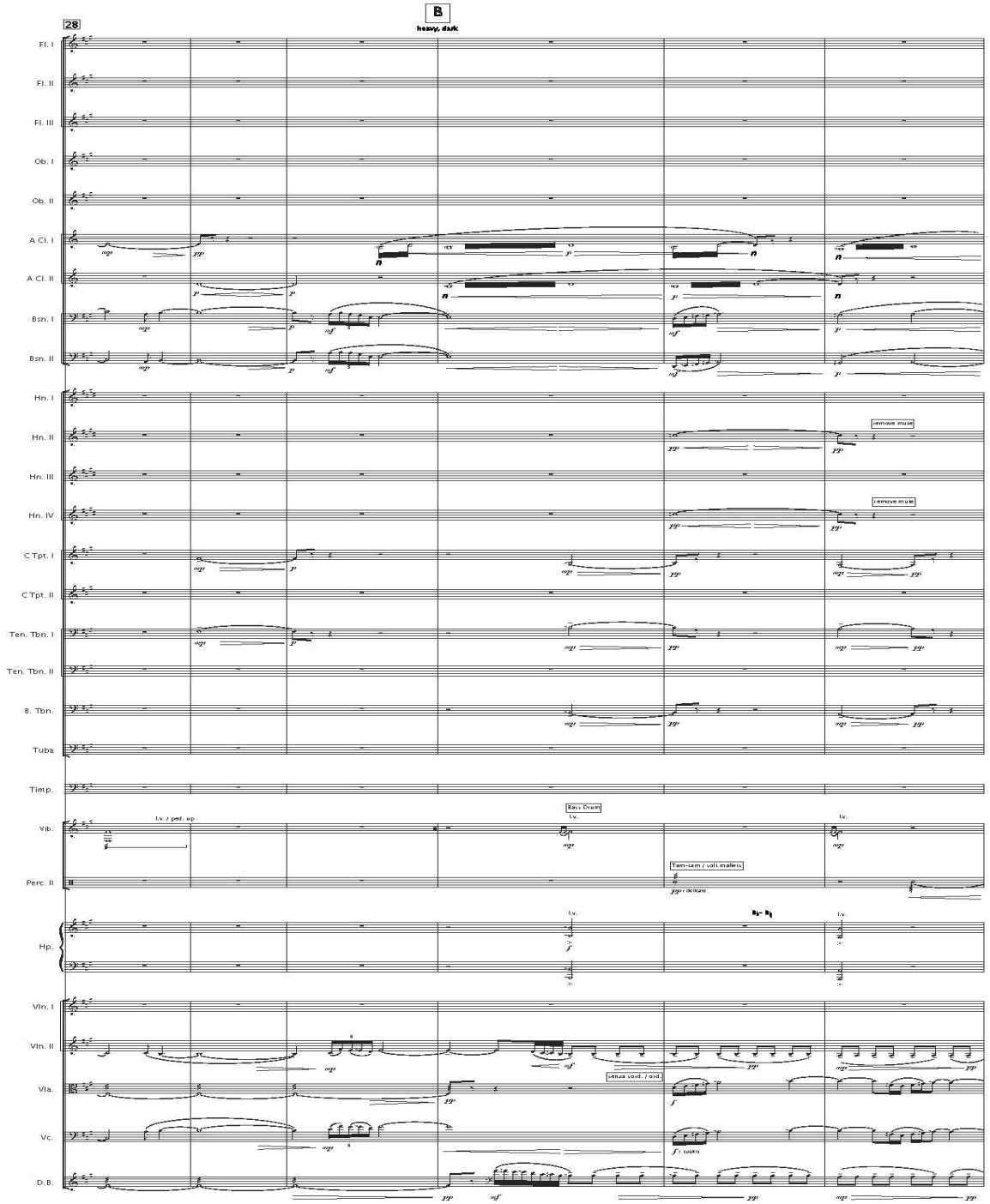
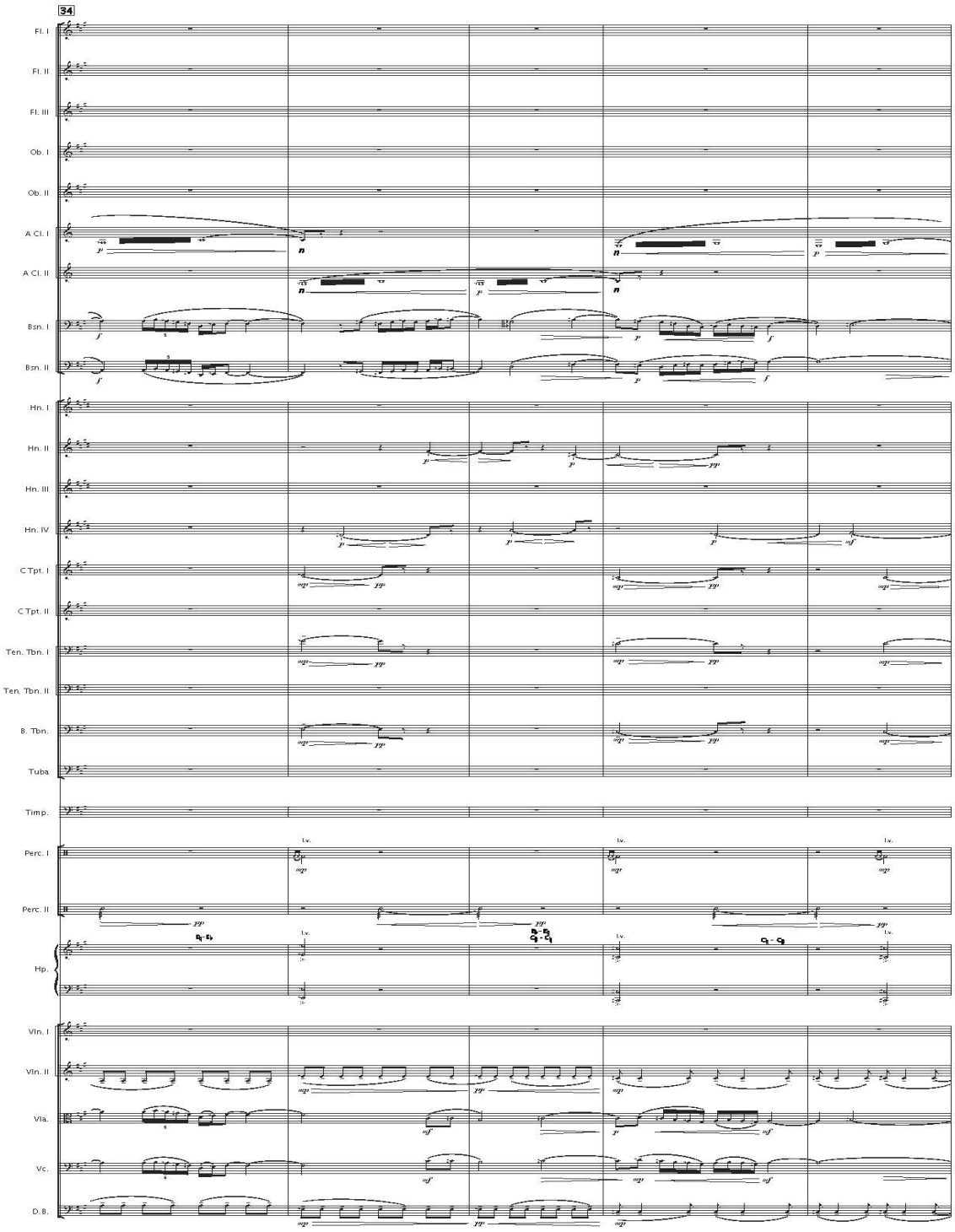
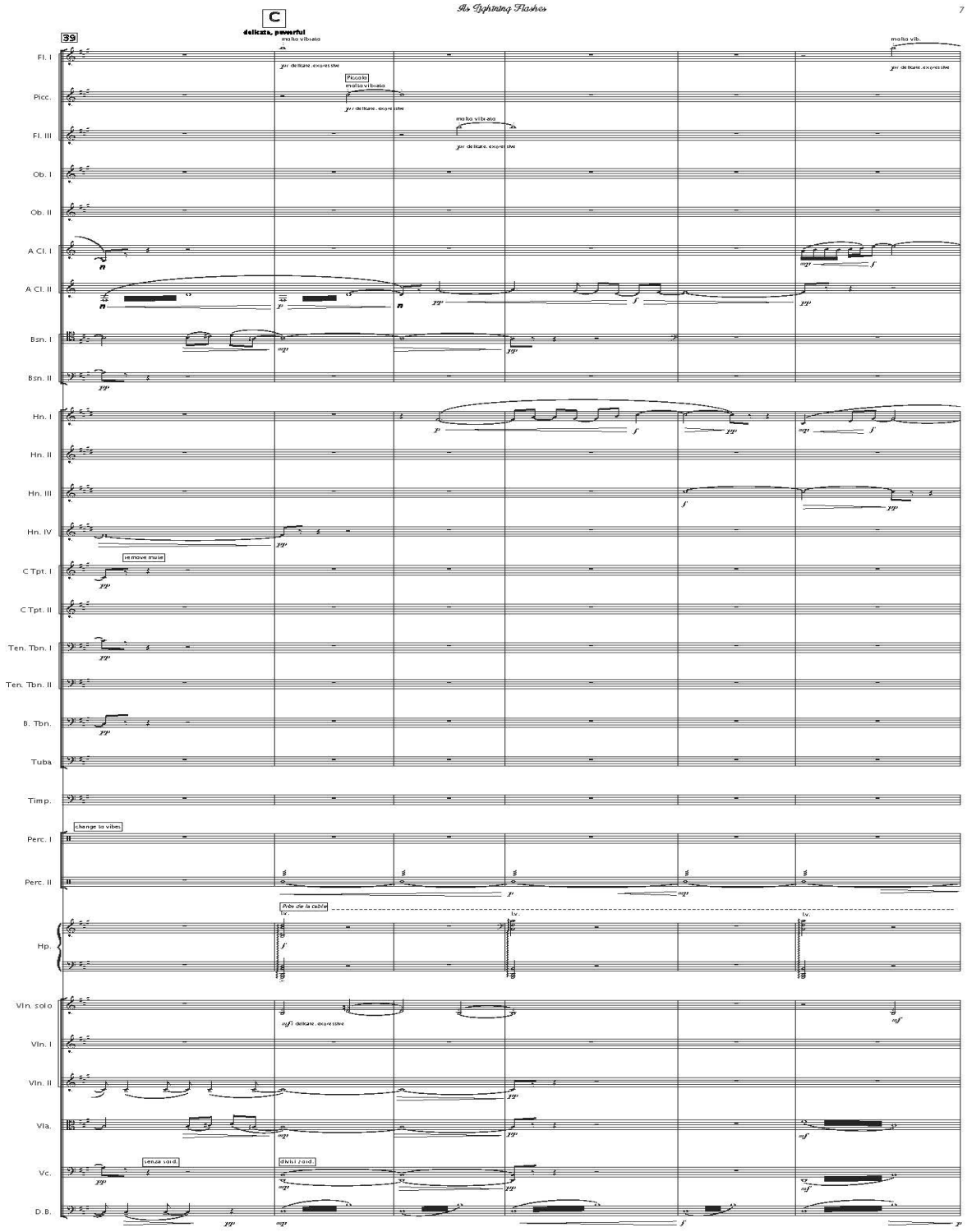

A
profound, tranquil
7
Fl. I
Fl. II
Fl. III
Ob. I
E. Hn.
A.Cl. I
A.Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Perc. I
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.
mute
l.v.

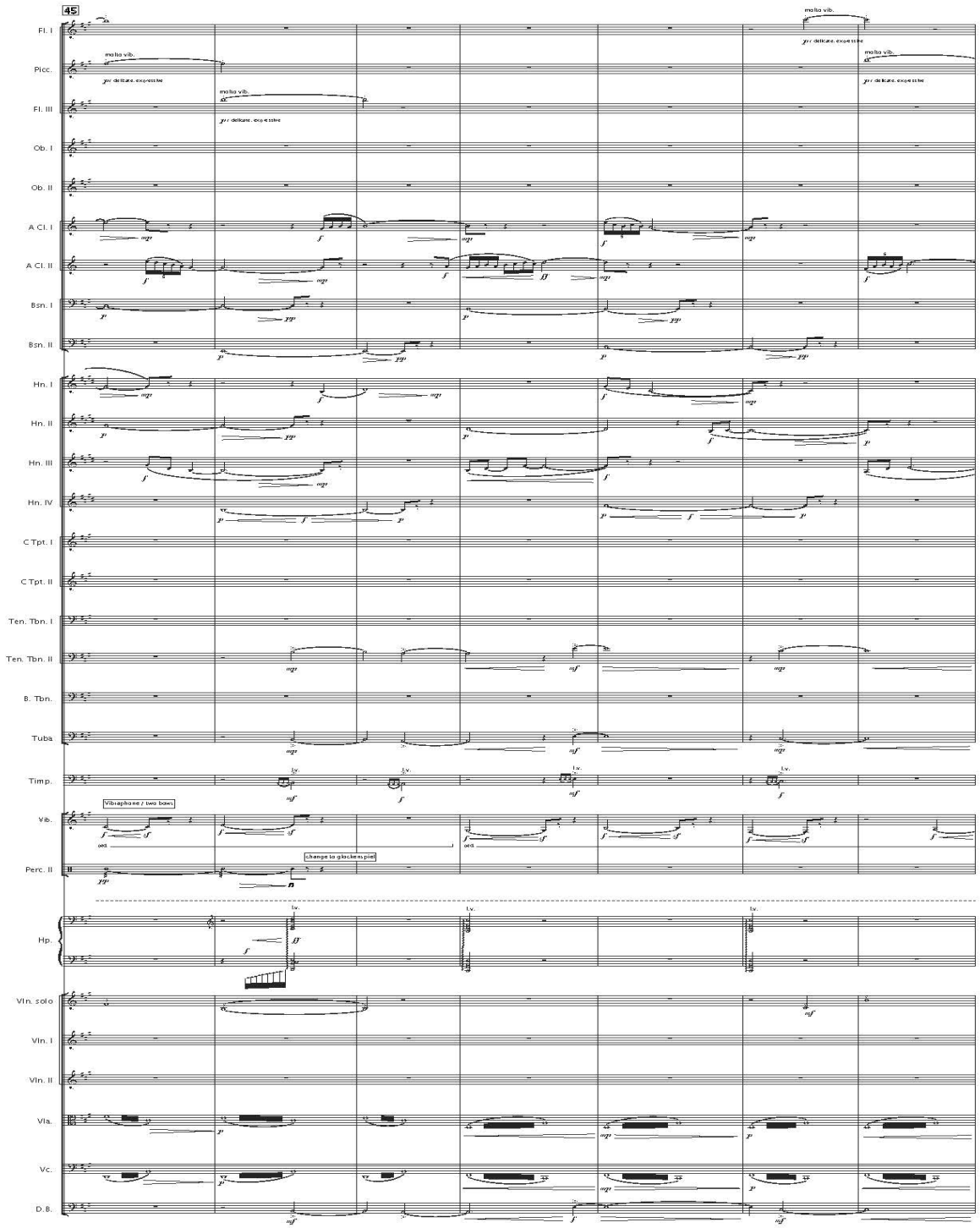

14
Fl. I
Fl. II
Fl. III
Ob. I
E. Hn.
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Perc. I
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.

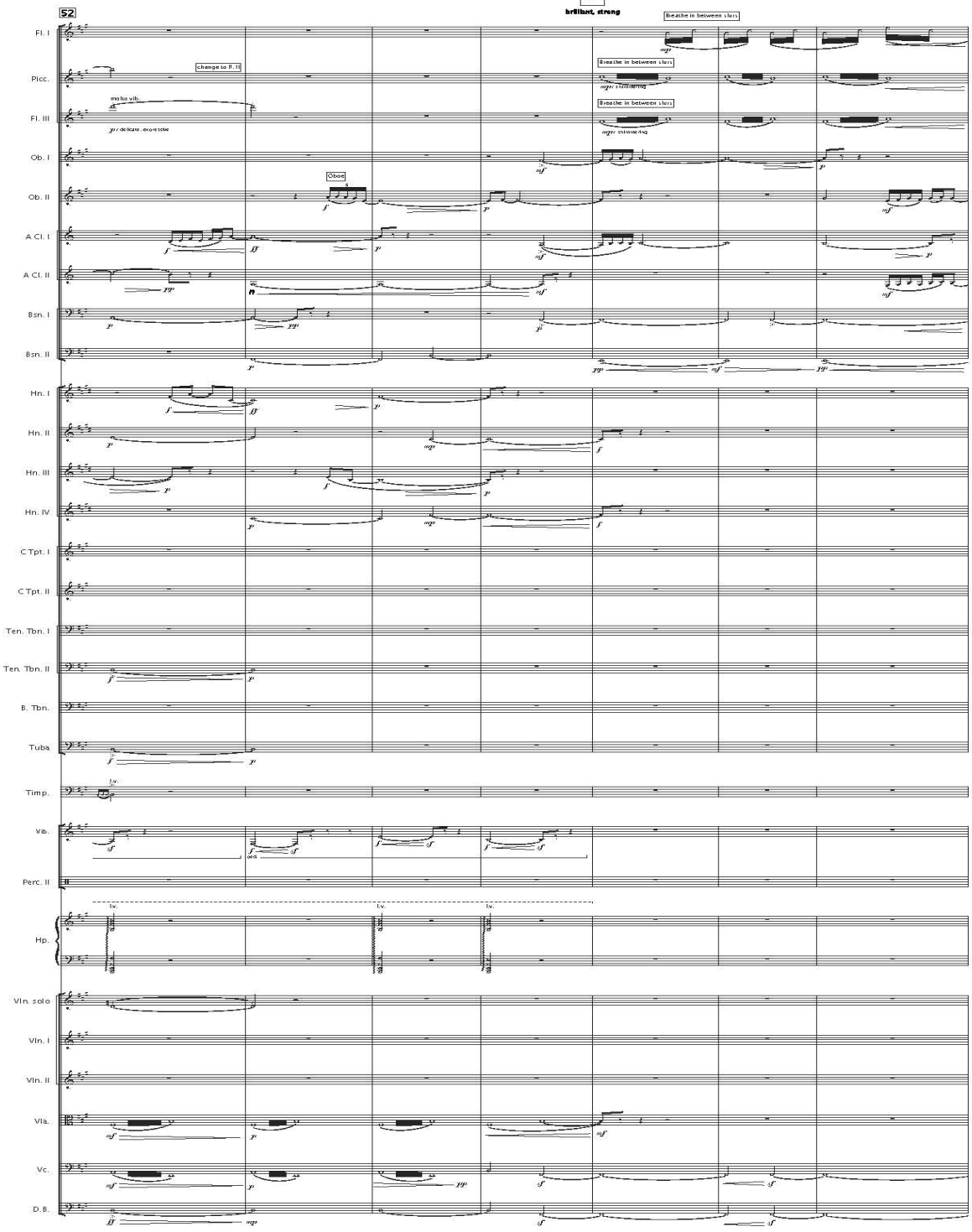

20
Fl. I
Fl. II
Fl. III
Ob. I
E. Hn.
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.
change to picc
change to ob. II
remove mute
cup mute
Vibraphone / soft mallets
l.v.
sul tasto
con sord. / sul tasto
con sord. / sul tasto / sul G
real pitch

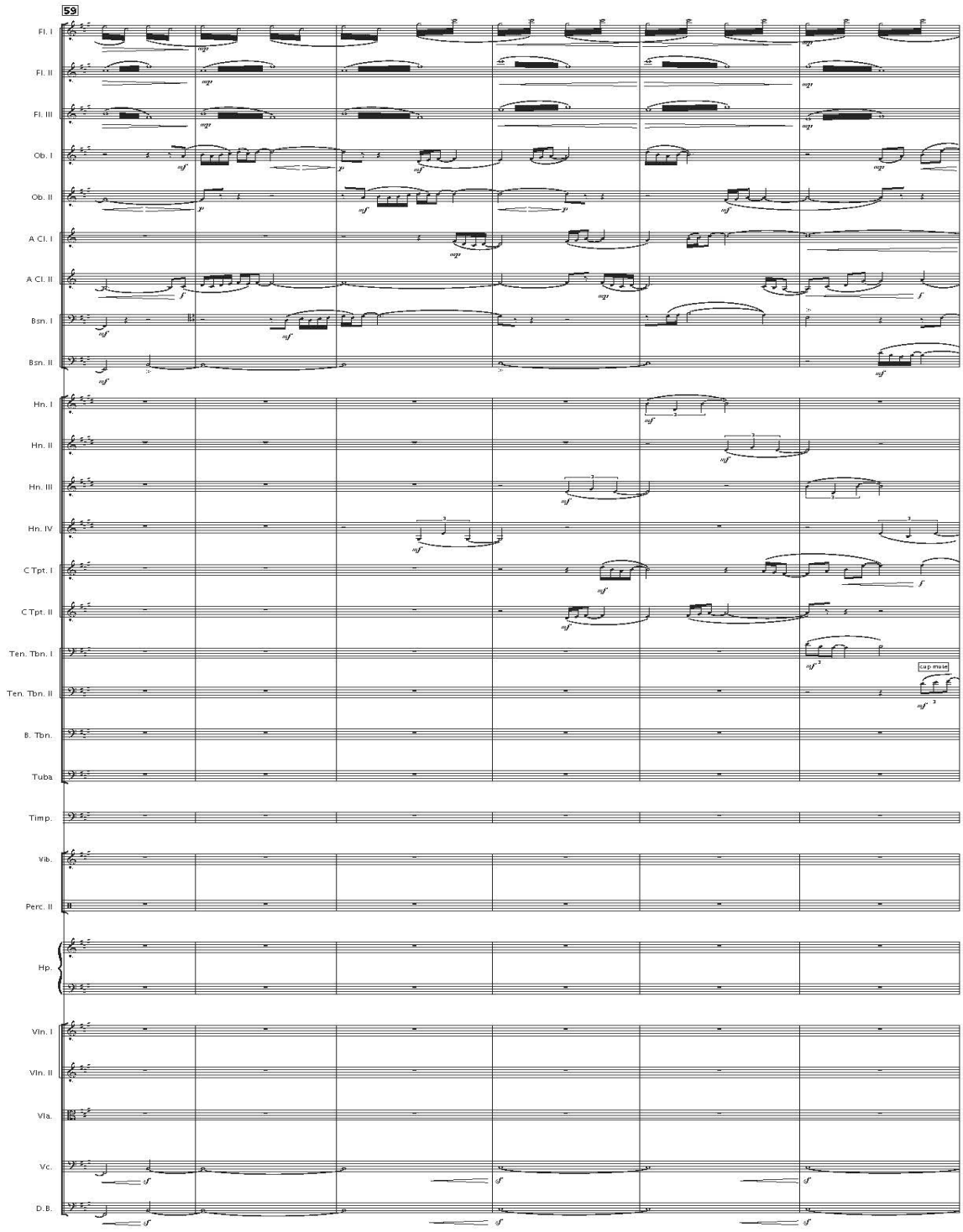

B
heavy, dark
28
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.
remove mute
remove mute
l.v. / ped. up
Bass Drum
l.v.
Tam-tam / soft mallets
senza sord. / sord.

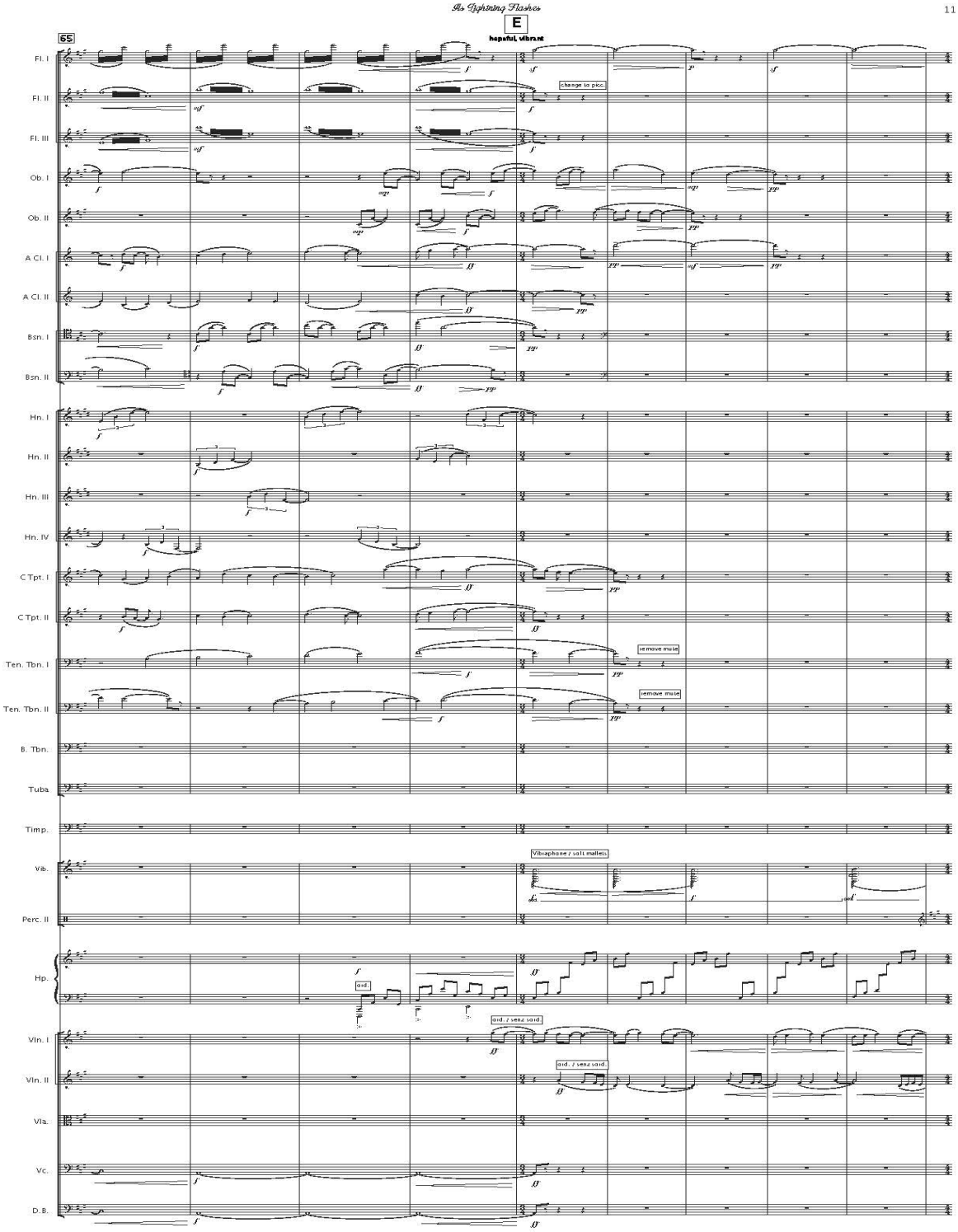

34
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Perc. I
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.

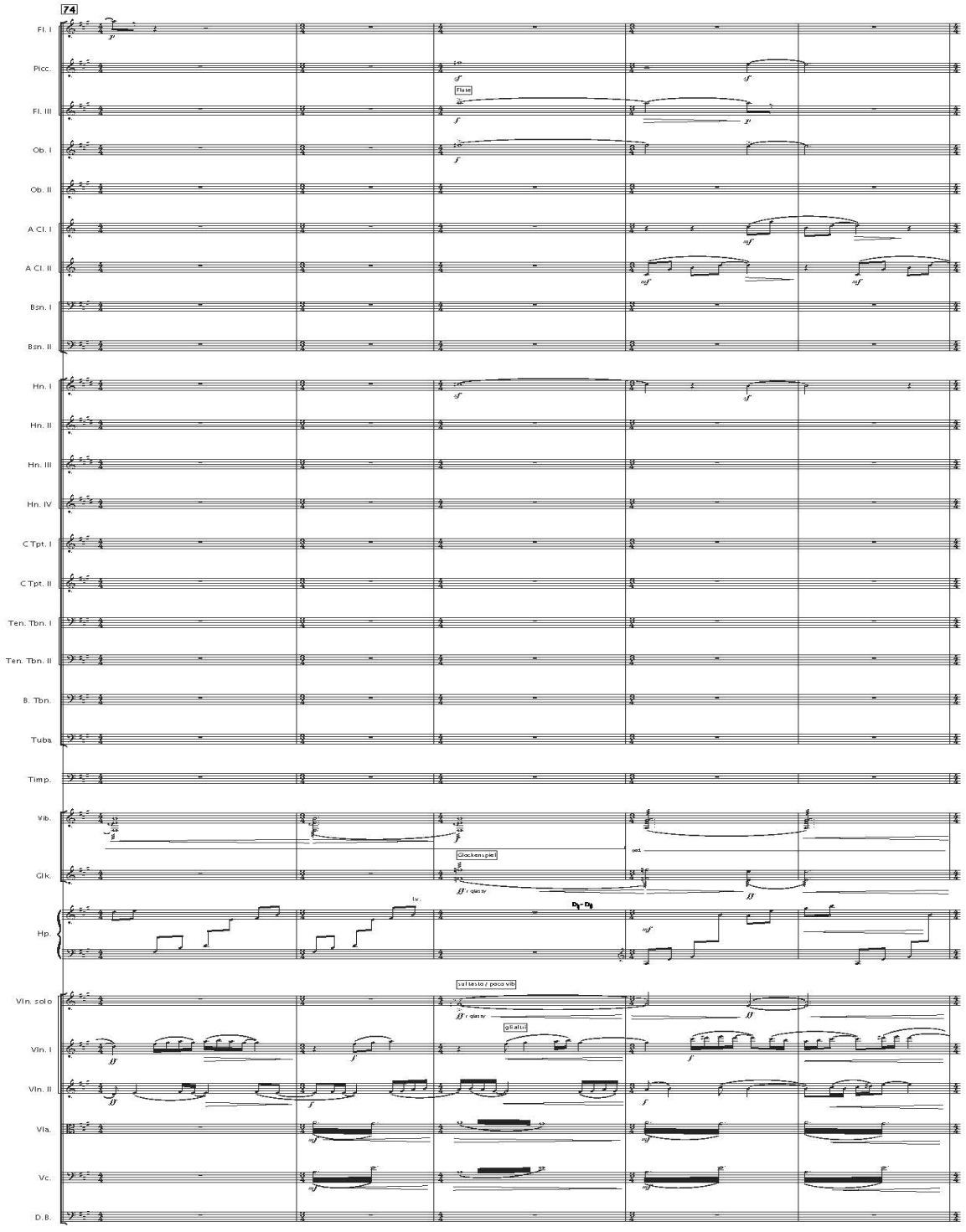

C
39
delicate, powerful
molto vibrato
Fl. I
Picc.
Fl. III
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Perc. I
Perc. II
Hp.
Vln. solo
Vln. I
Vln. II
Vla.
Vc.
D.B.
Piccolo
molto vibrato
gv. delicate, expressive
le move mute
change to vibes
Près de la table
senza sord.
divisi pizz.

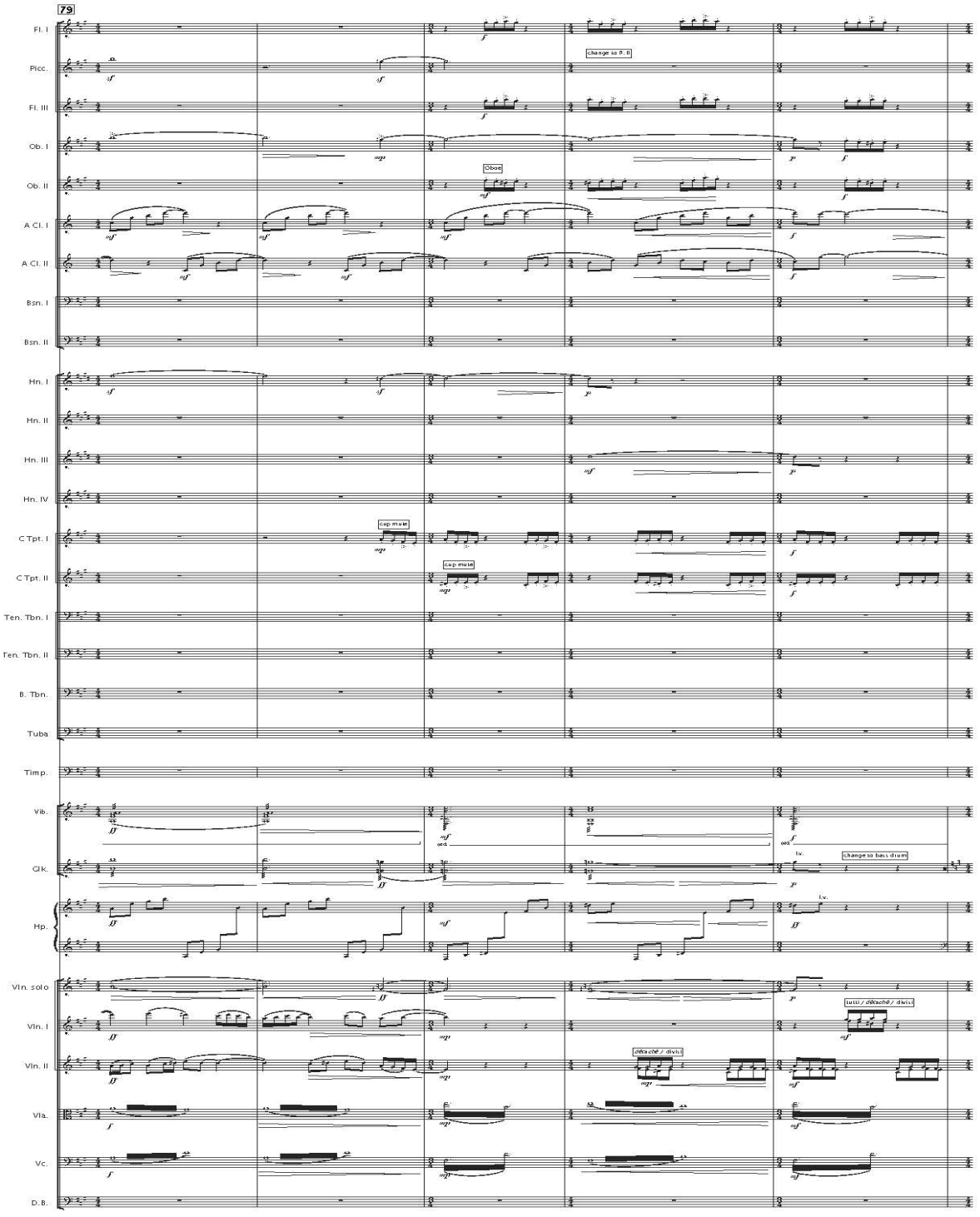

45
Fl. I
Picc.
Fl. III
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. solo
Vln. I
Vln. II
Vla.
Vc.
D. B.
molto vib.
Vibraphone / two bows
change to glockenspiel

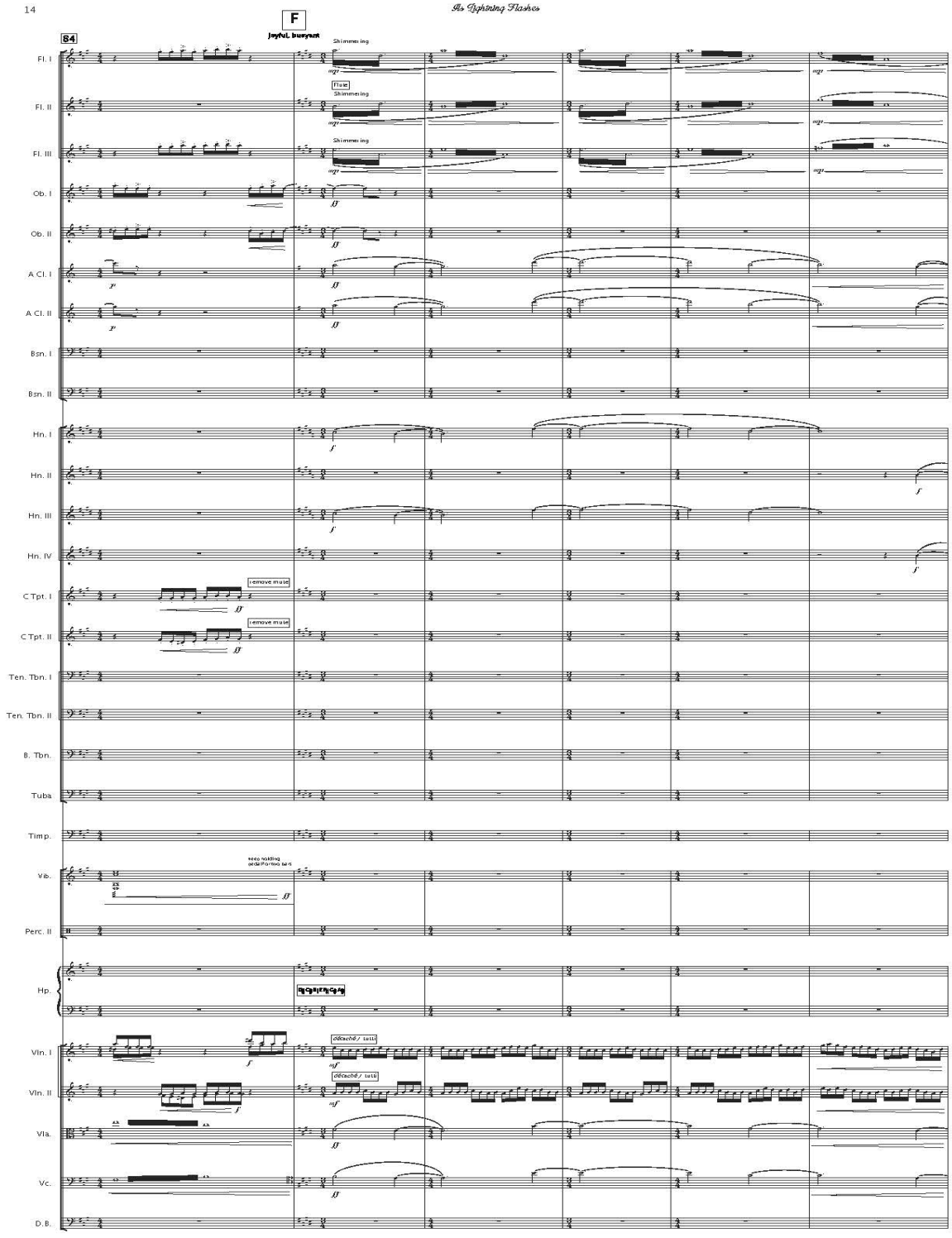

52
D
brilliant, strong
Breathe in between slurs
Fl. I
Picc.
Fl. III
Ob. I
Ob. II
A.Cl. I
A.Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. solo
Vln. I
Vln. II
Vla.
Vc.
D.B.

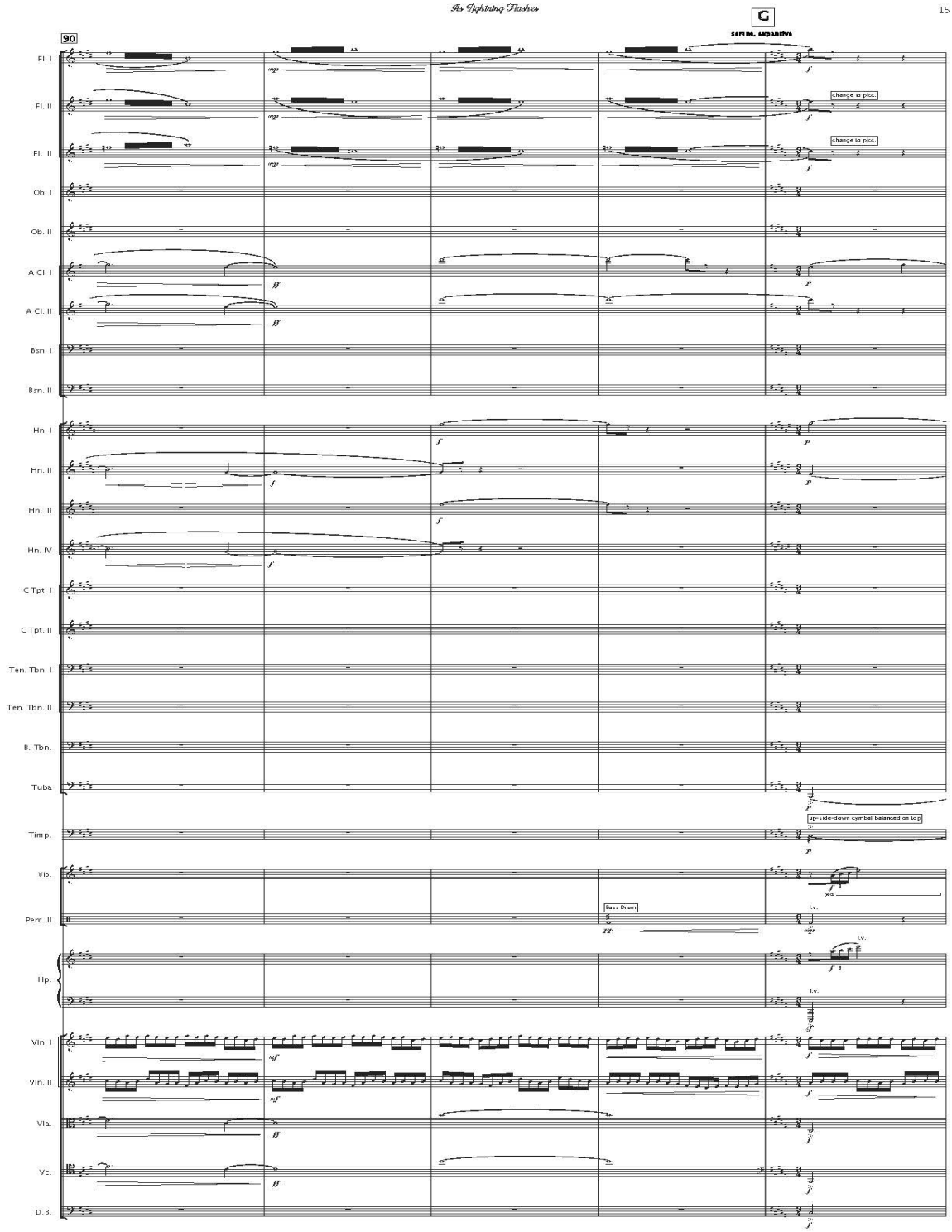

59
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
cup mute
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.

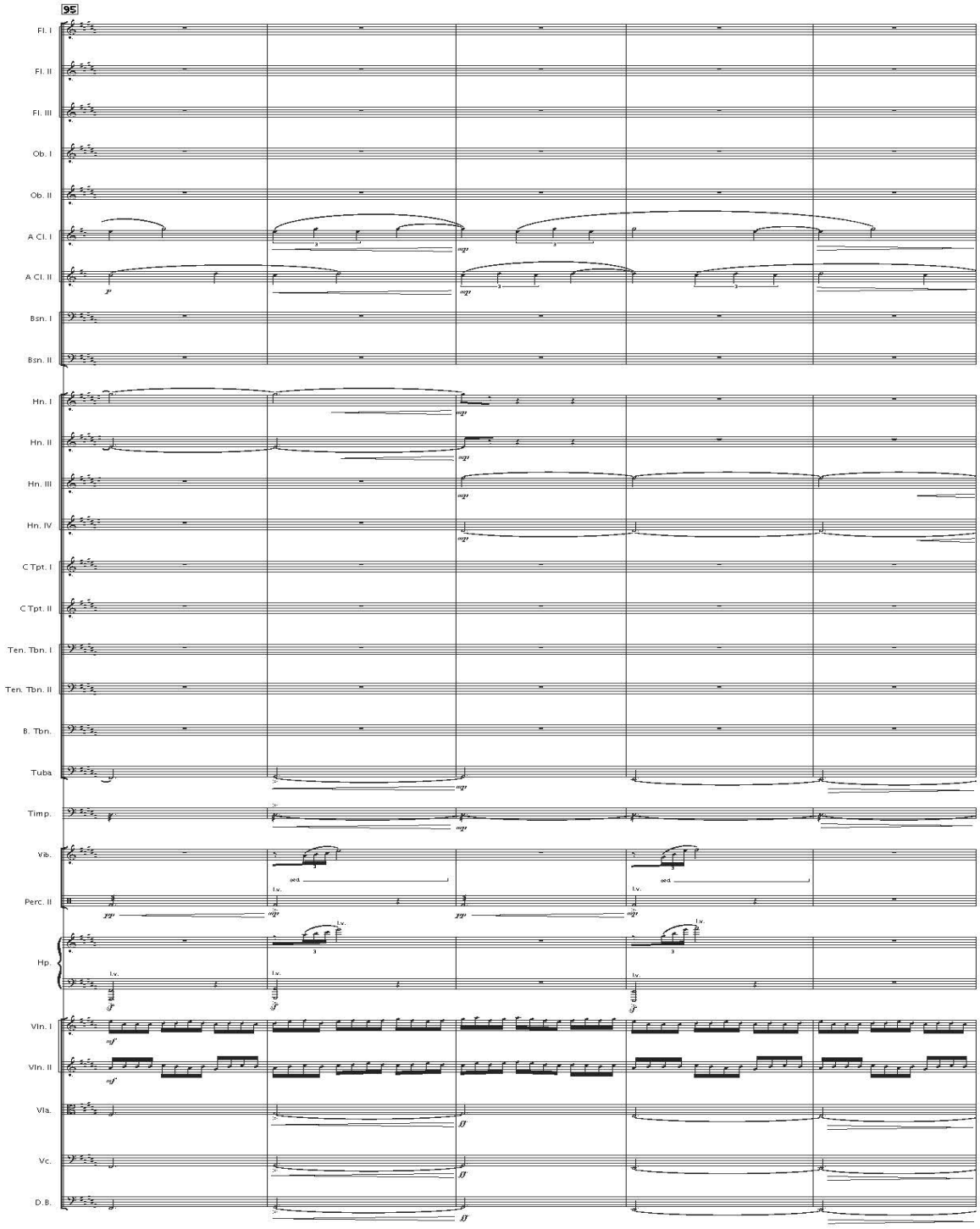

E
hopeful, vibrant
65
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.
change to picc.
remove mute
remove mute
Vibraphone / soft mallets
aid.
aid. / senz said.
aid. / senz said.

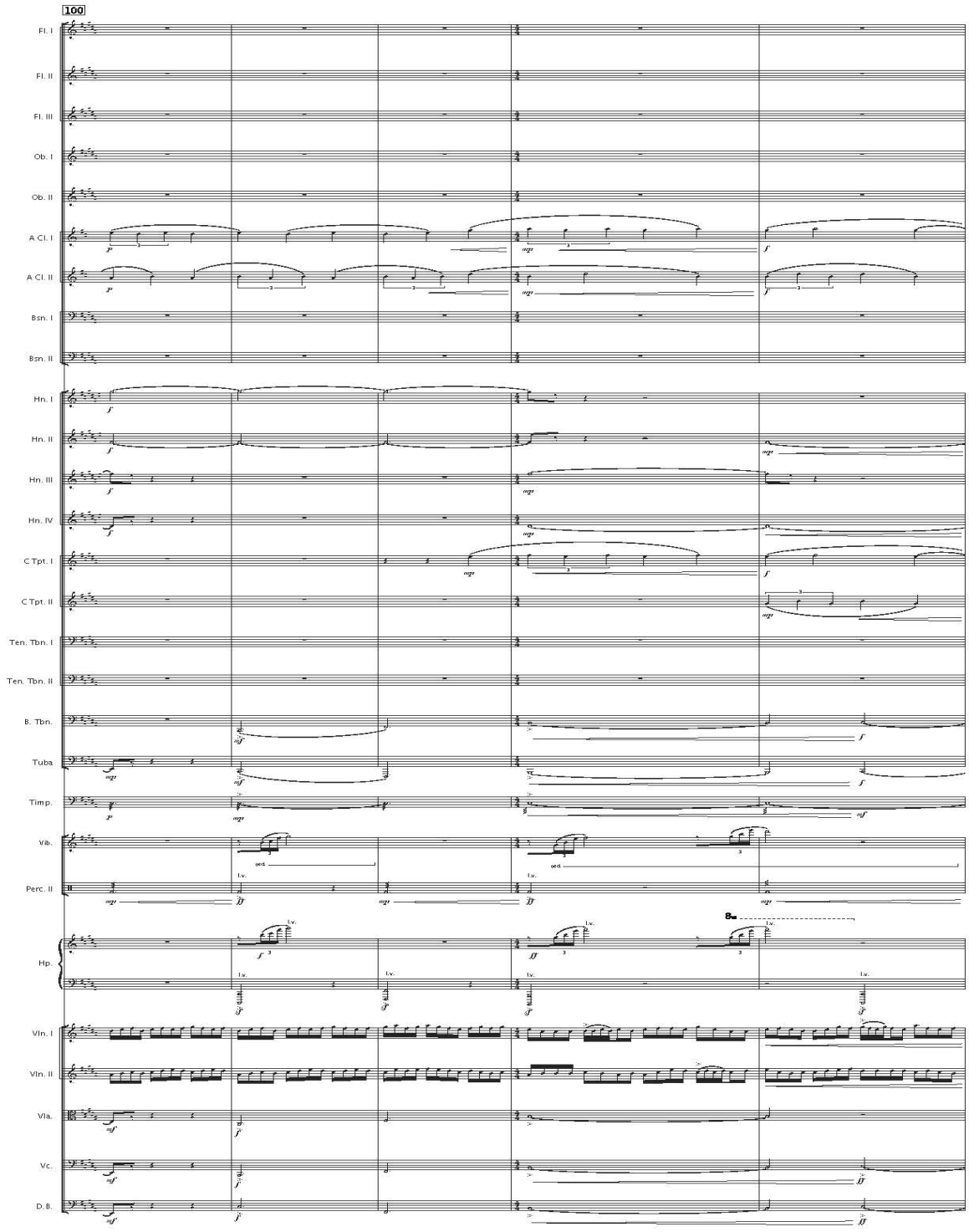

74
Fl. I
Picc.
Fl. III
Flute
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Glk.
Glockenspiel
Hp.
Vln. solo
sul tasto / poco vib
gliss.
Vln. I
Vln. II
Vla.
Vc.
D. B.

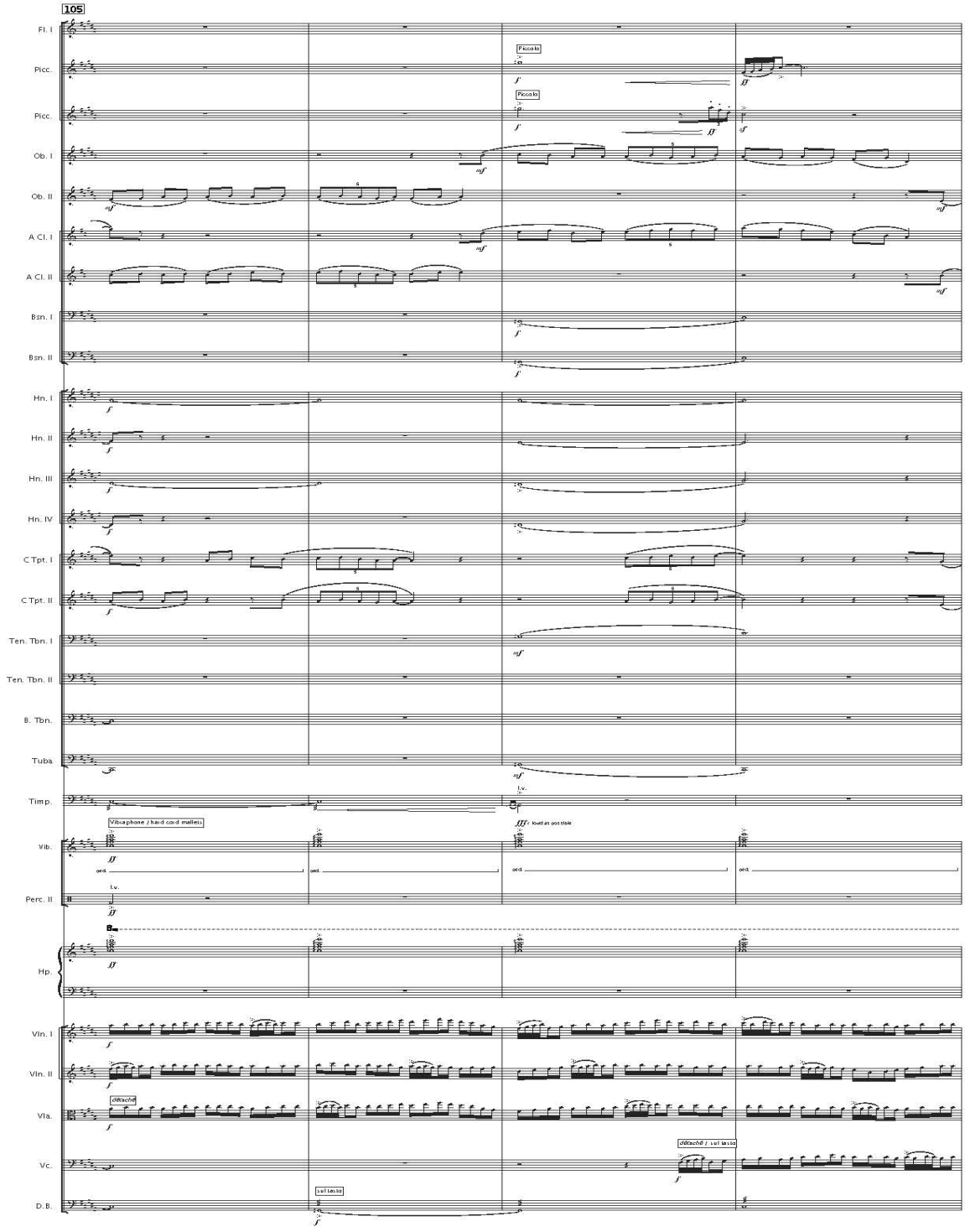

79
Fl. I
Picc.
Fl. III
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Glk.
Hp.
Vln. solo
Vln. I
Vln. II
Vla.
Vc.
D.B.
change to Fl. II
Oboe
cup mute
cup mute
l.v.
change to bass drum
l.v.
tutti / détaché / divisi
détaché / divisi

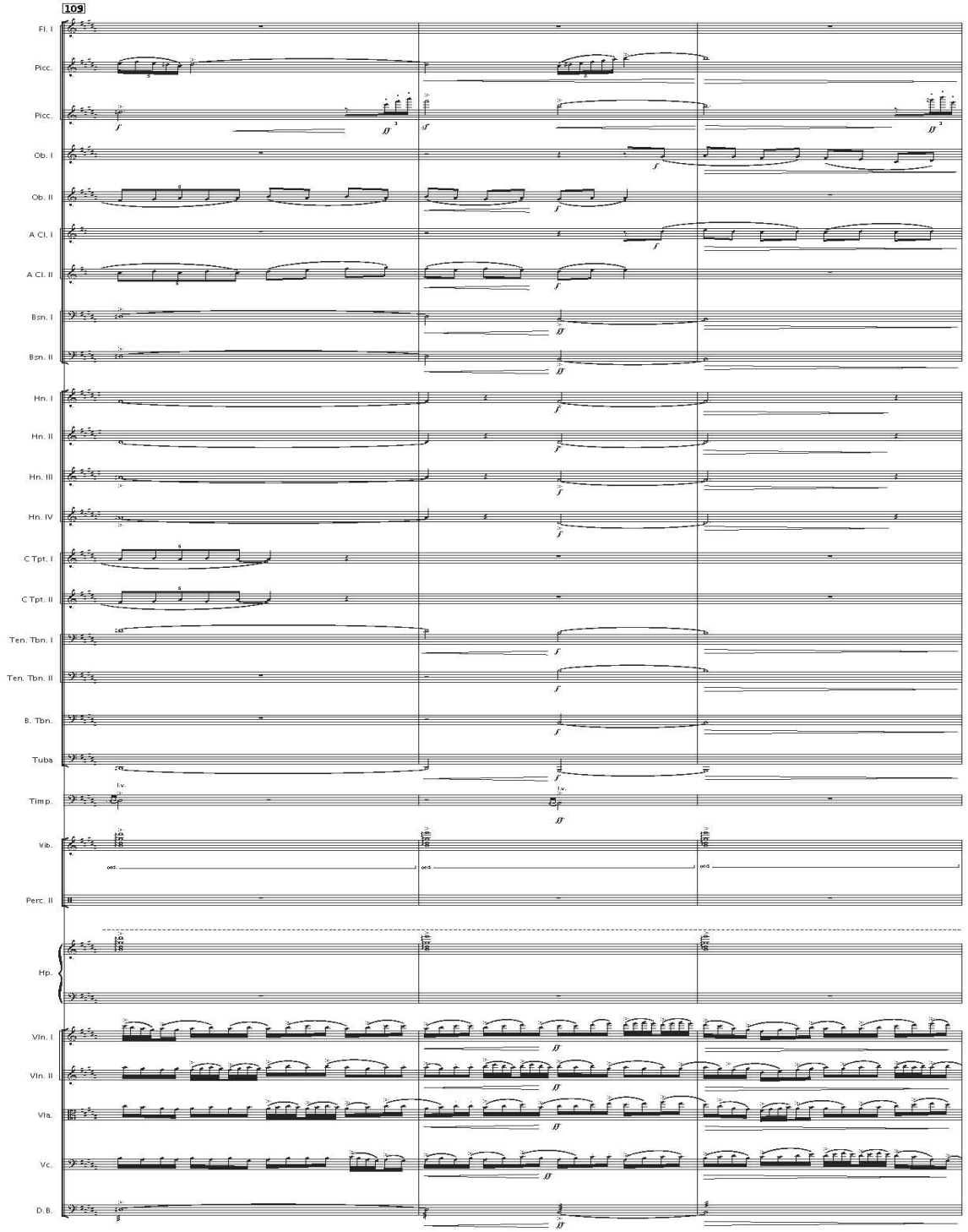

F
Joyful buoyant
84
Shimmering
Flute
Shimmering
Shimmering
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
remove mute
remove mute
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.
détaché / tutti
détaché / tutti

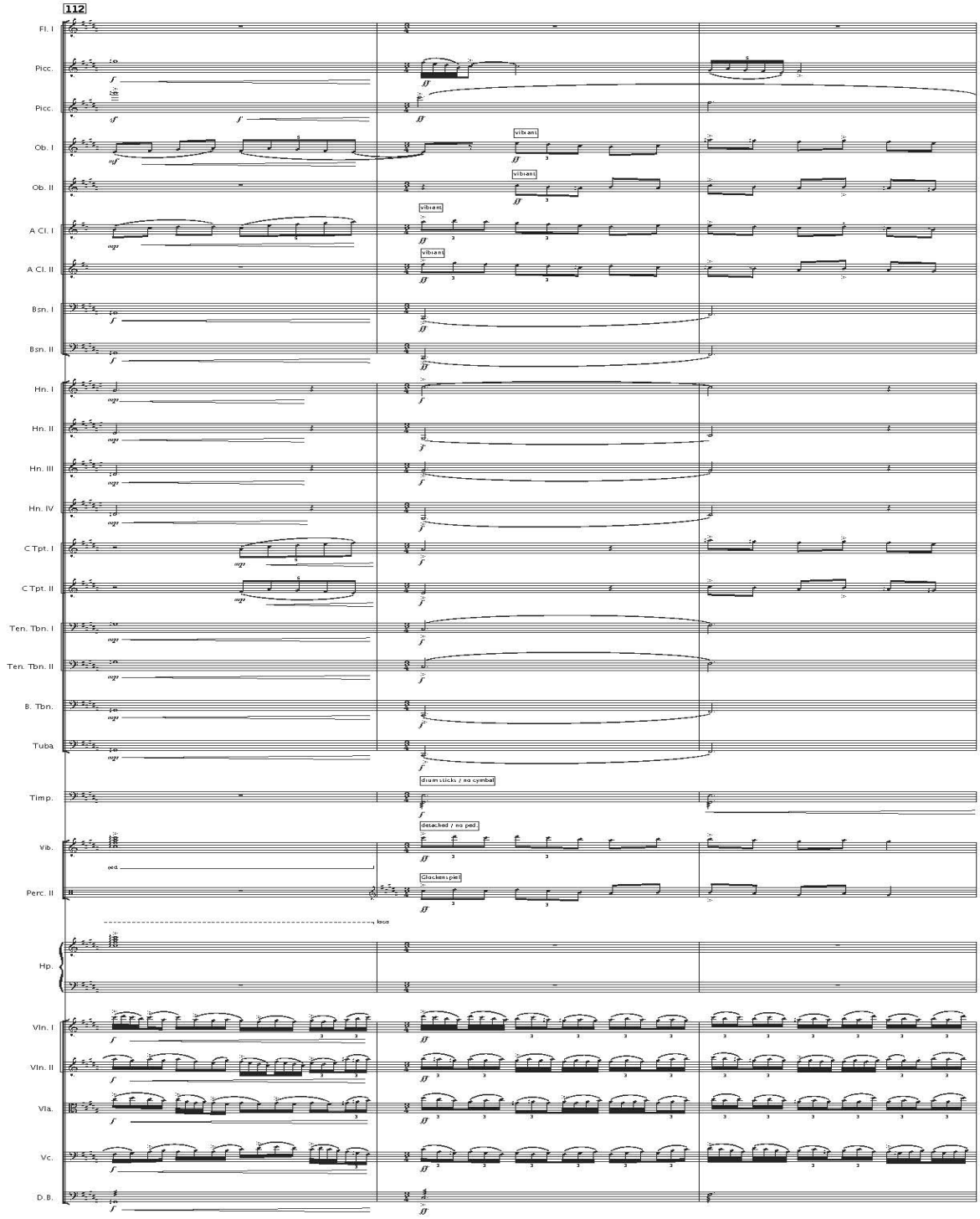

90
G
serene, expansive
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.
change to picc.
change to picc.
Bass Drum
l.v.
l.v.
l.v.

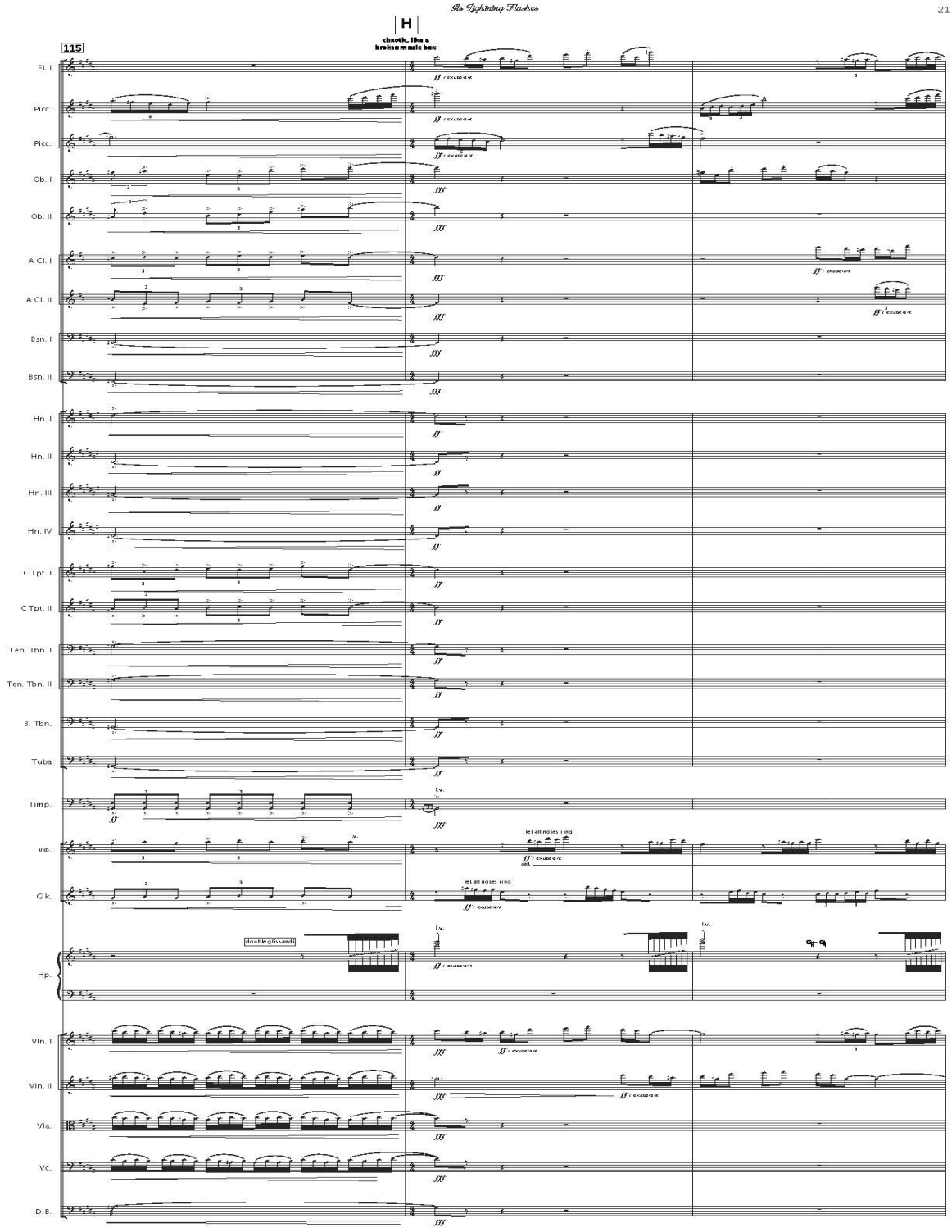

95
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.

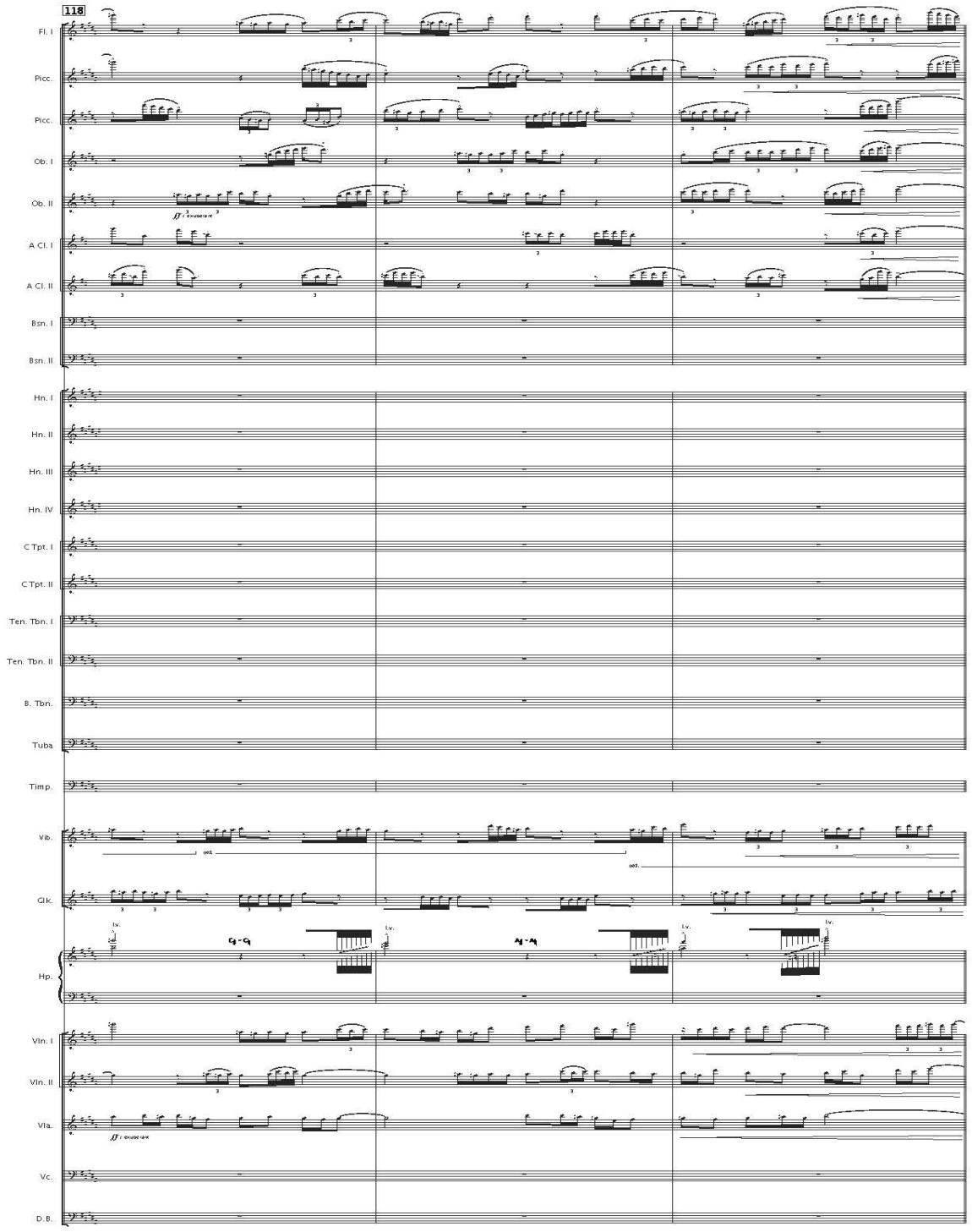

100
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
A. Cl. I
A. Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.

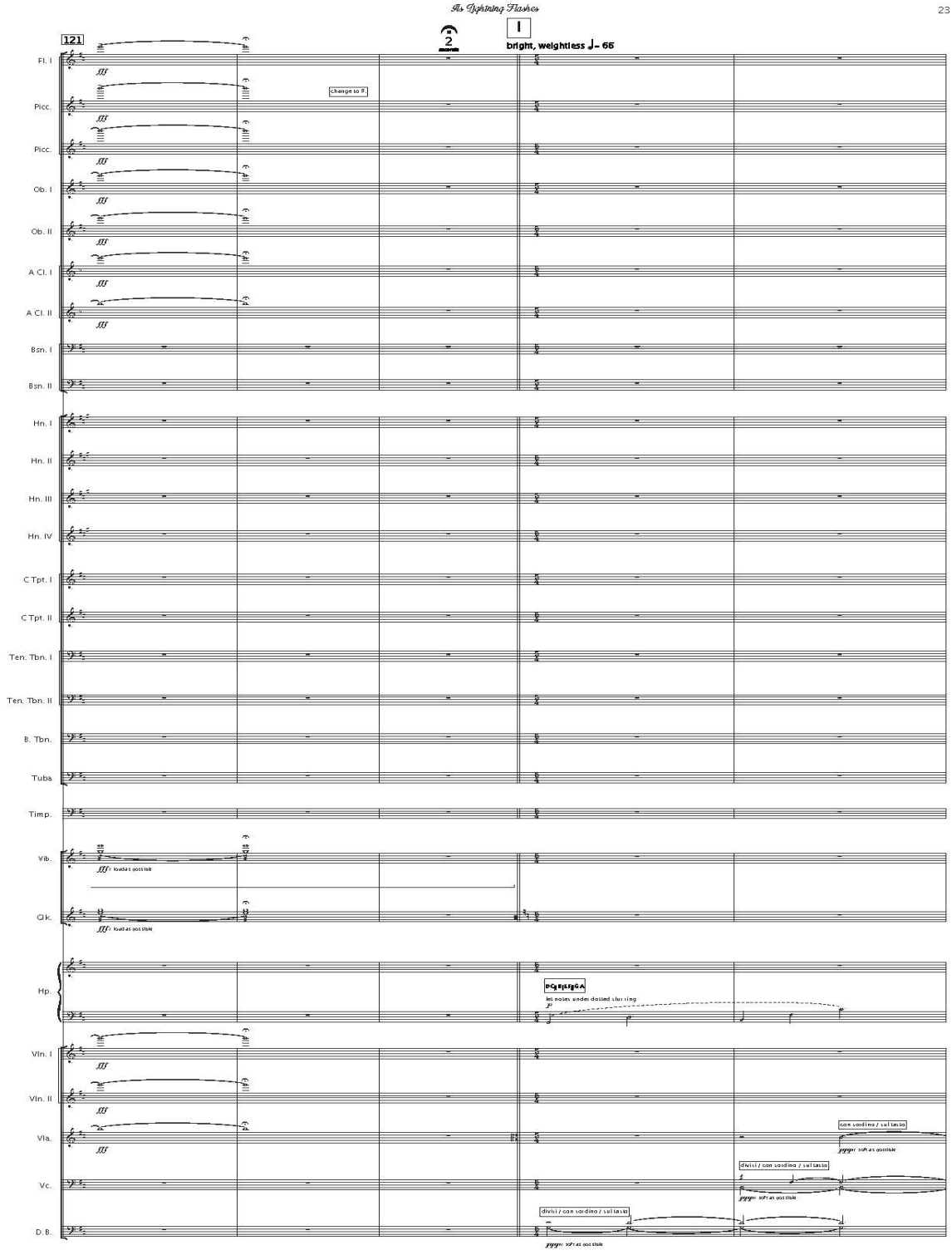

105
Fl. I
Picc.
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.
Piccolo
Piccolo
Vibraphone / hard cord mallets
ord.
l.v.
détaché
détaché / sul tasto
sul tasto

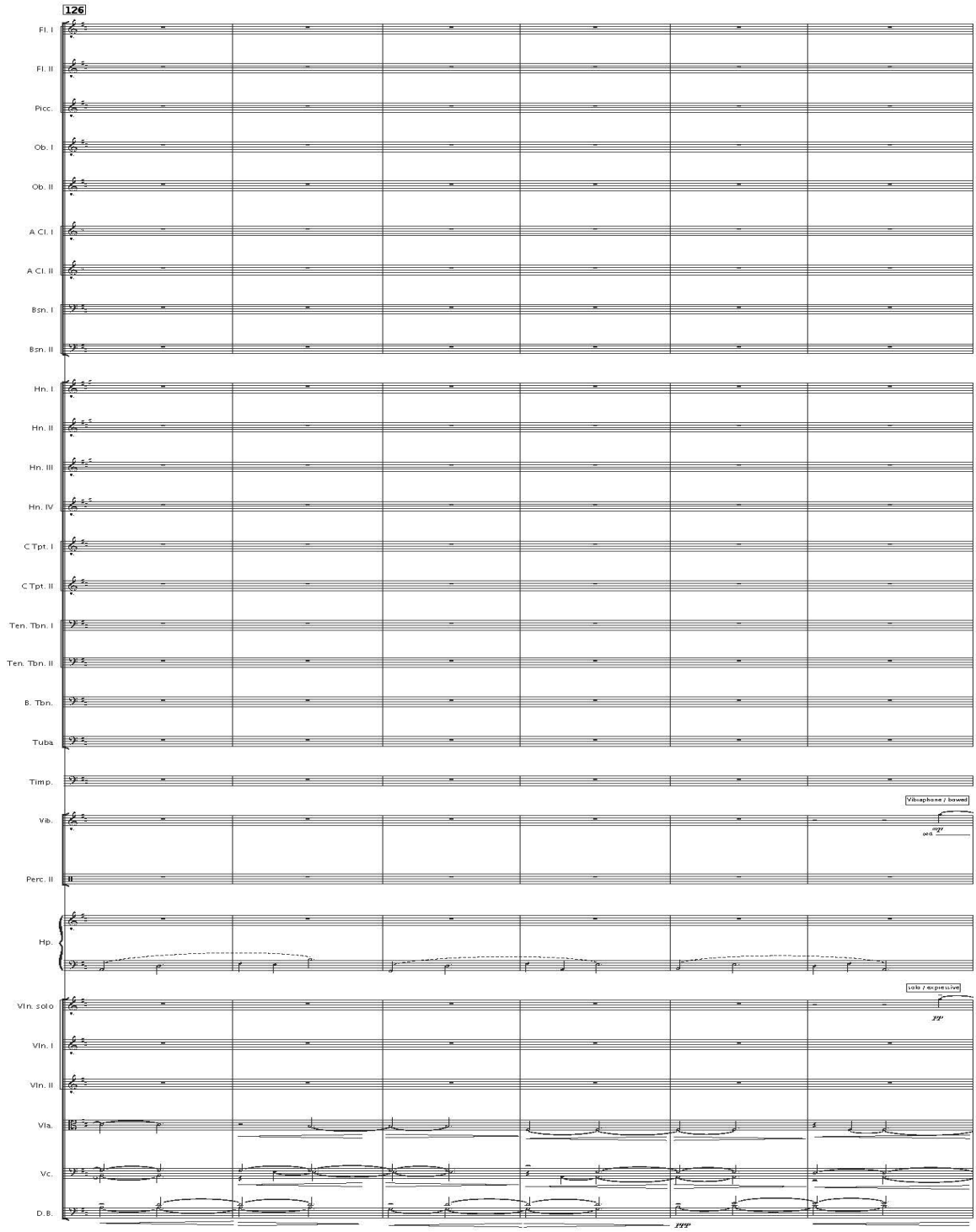

109
Fl. I
Picc.
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.

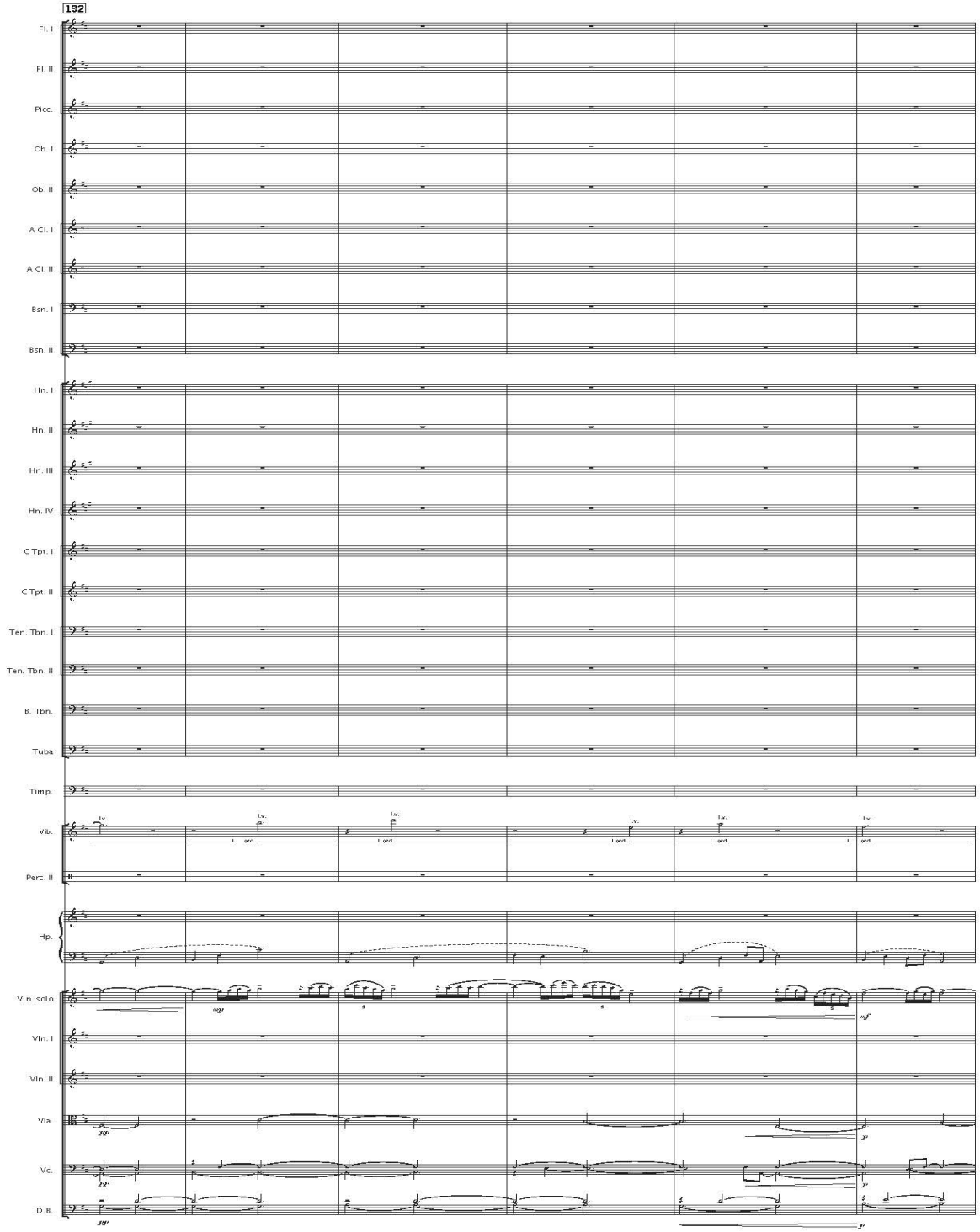

112
Fl. I
Picc.
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.
vibrant
drum sticks / no cymbal
detached / no ped.
Glockenspiel
loco

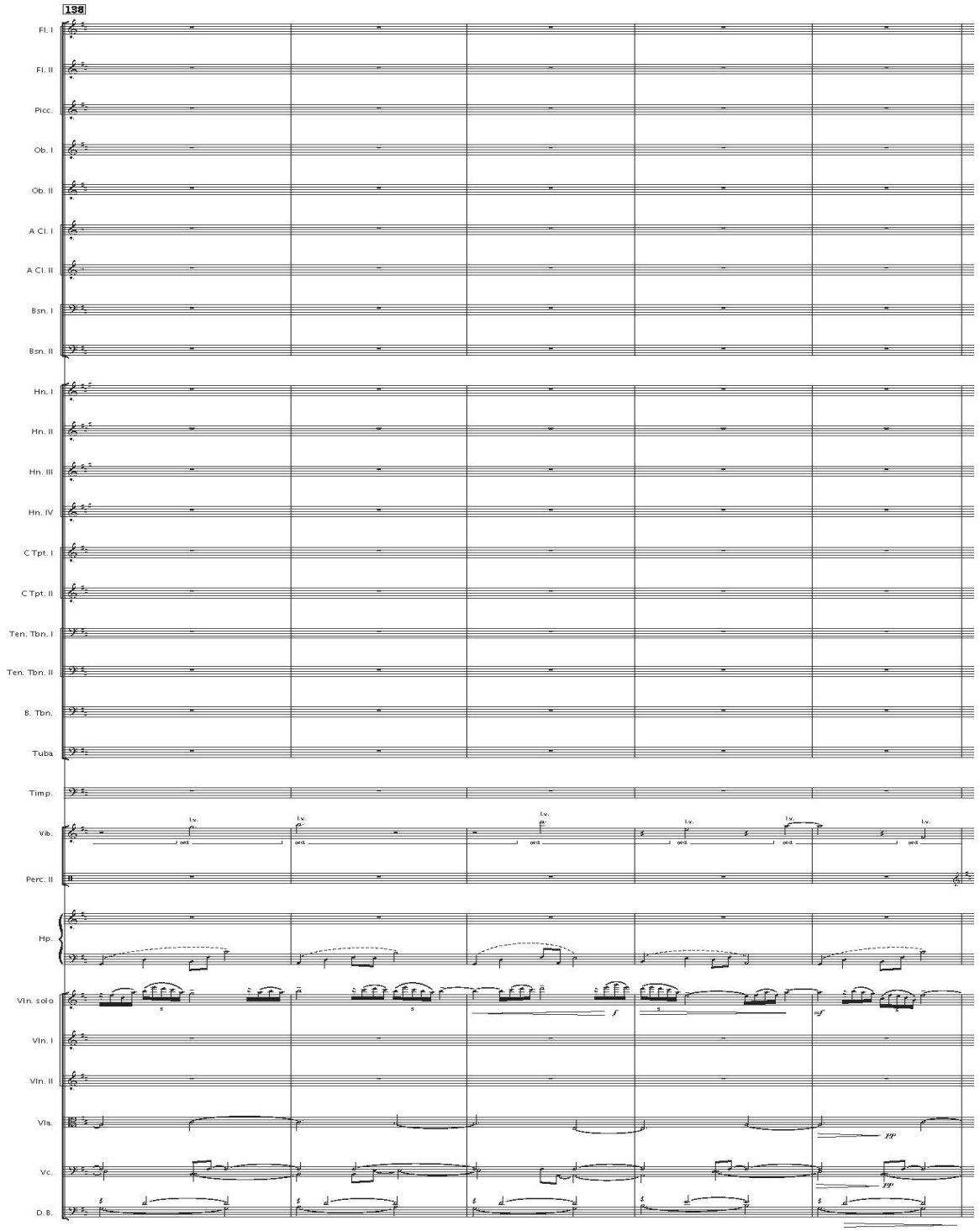

H
chaotic, like a broken music box
115
Fl. I
Picc.
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Glk.
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.
let all notes ring
l.v.
double gliss and
fff
ff
sfz

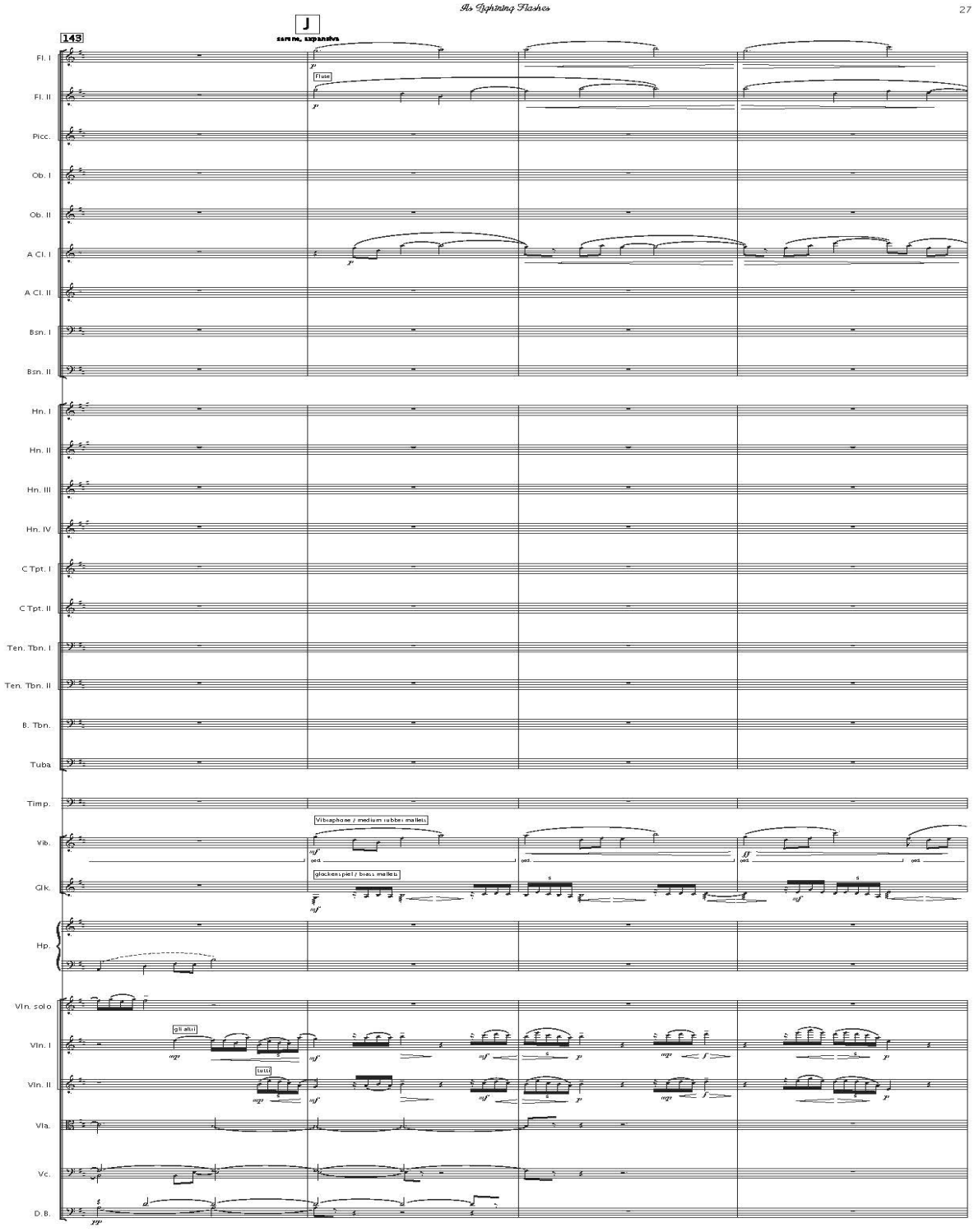

118
Fl. I
Picc.
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Glk.
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.

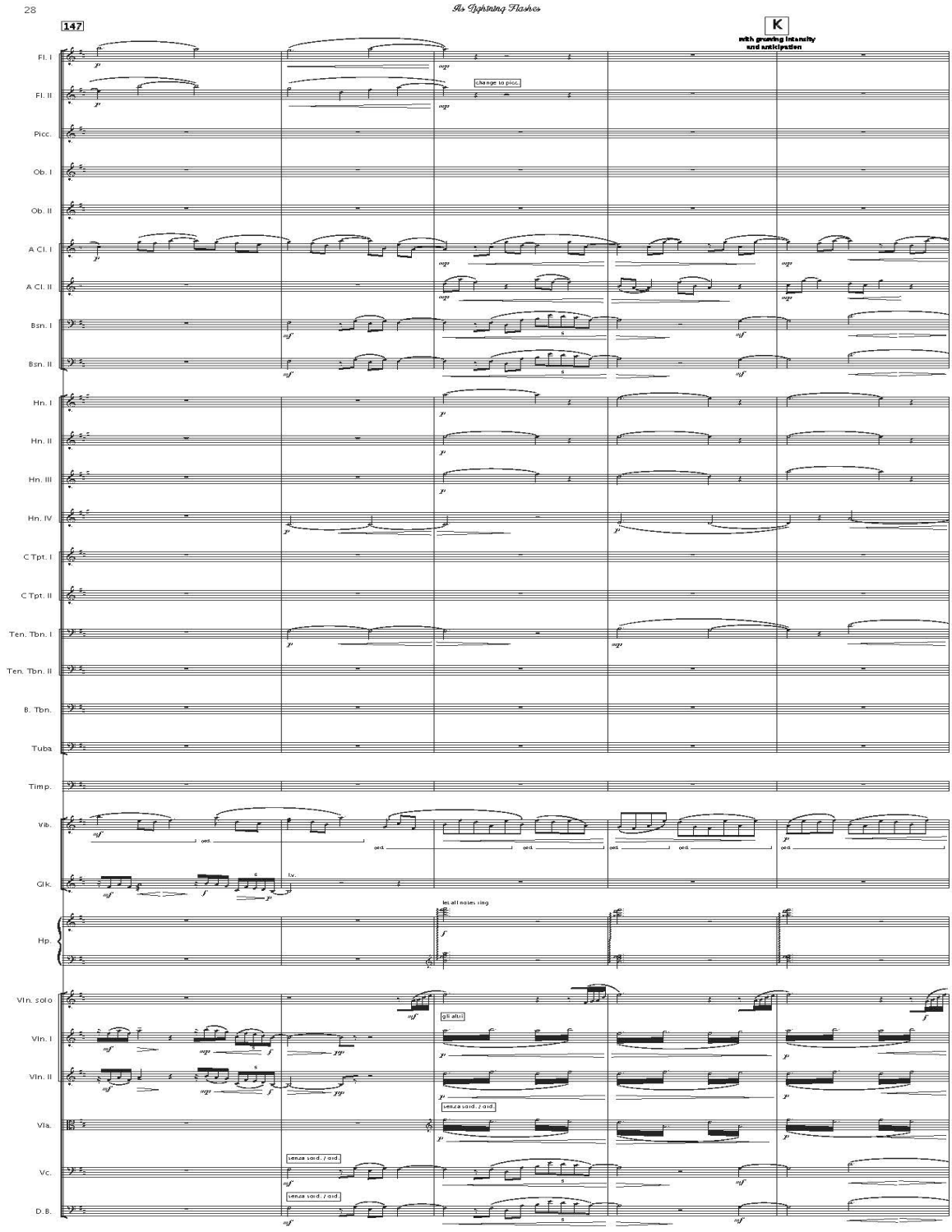

121
2
I
bright, weightless ♩= 66
Change to F.
Fl. I
Picc.
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Glk.
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.
let notes under dotted slur ring
con sordino / sul tasto
divisi / con sordino / sul tasto
divisi / con sordino / sul tasto

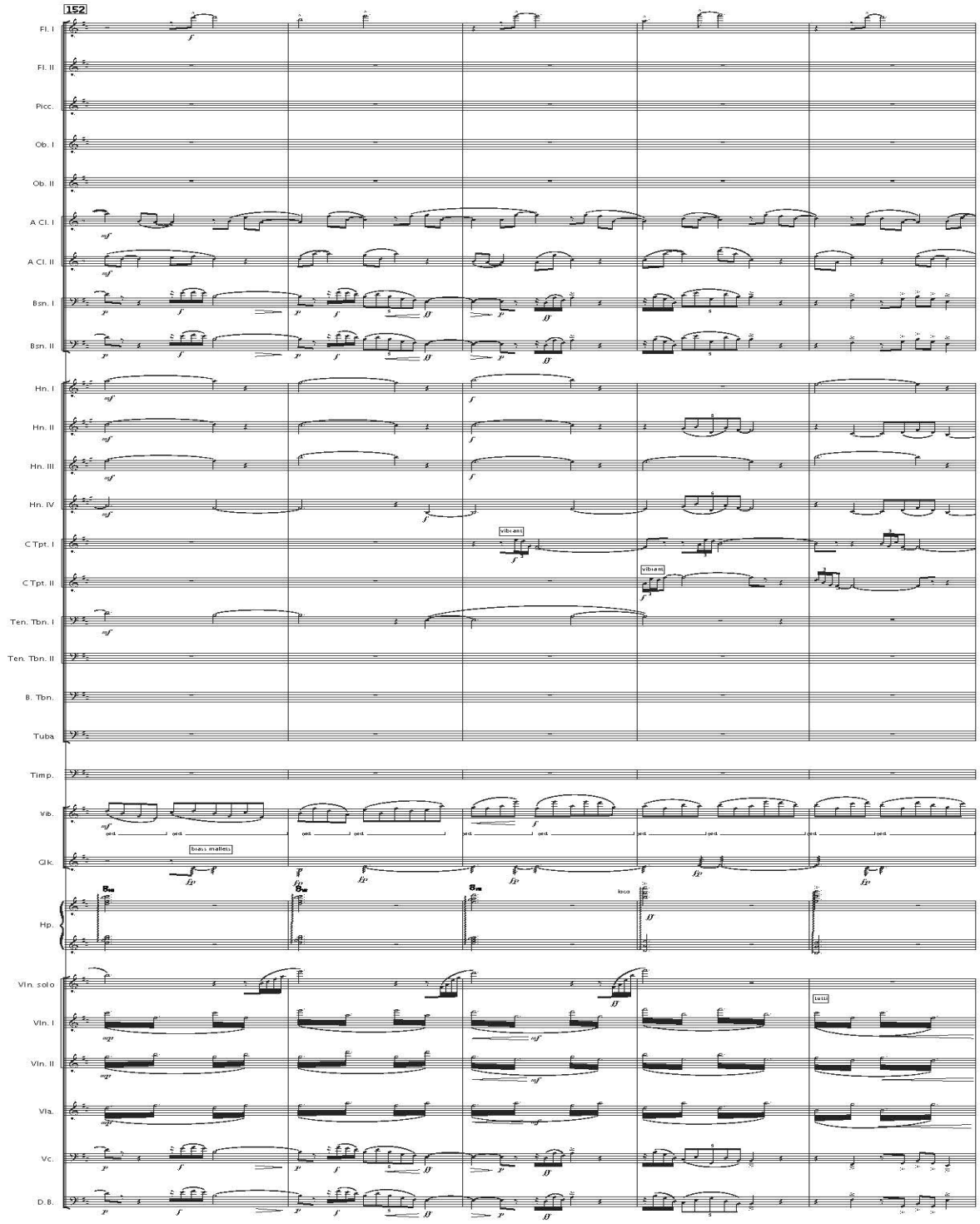

126
Fl. I
Fl. II
Picc.
Ob. I
Ob. II
A.Cl. I
A.Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C.Tpt. I
C.Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Vibraphone / bowed
Perc. II
Hp.
Vln. solo
Solo / expressive
Vln. I
Vln. II
Vla.
Vc.
D.B.

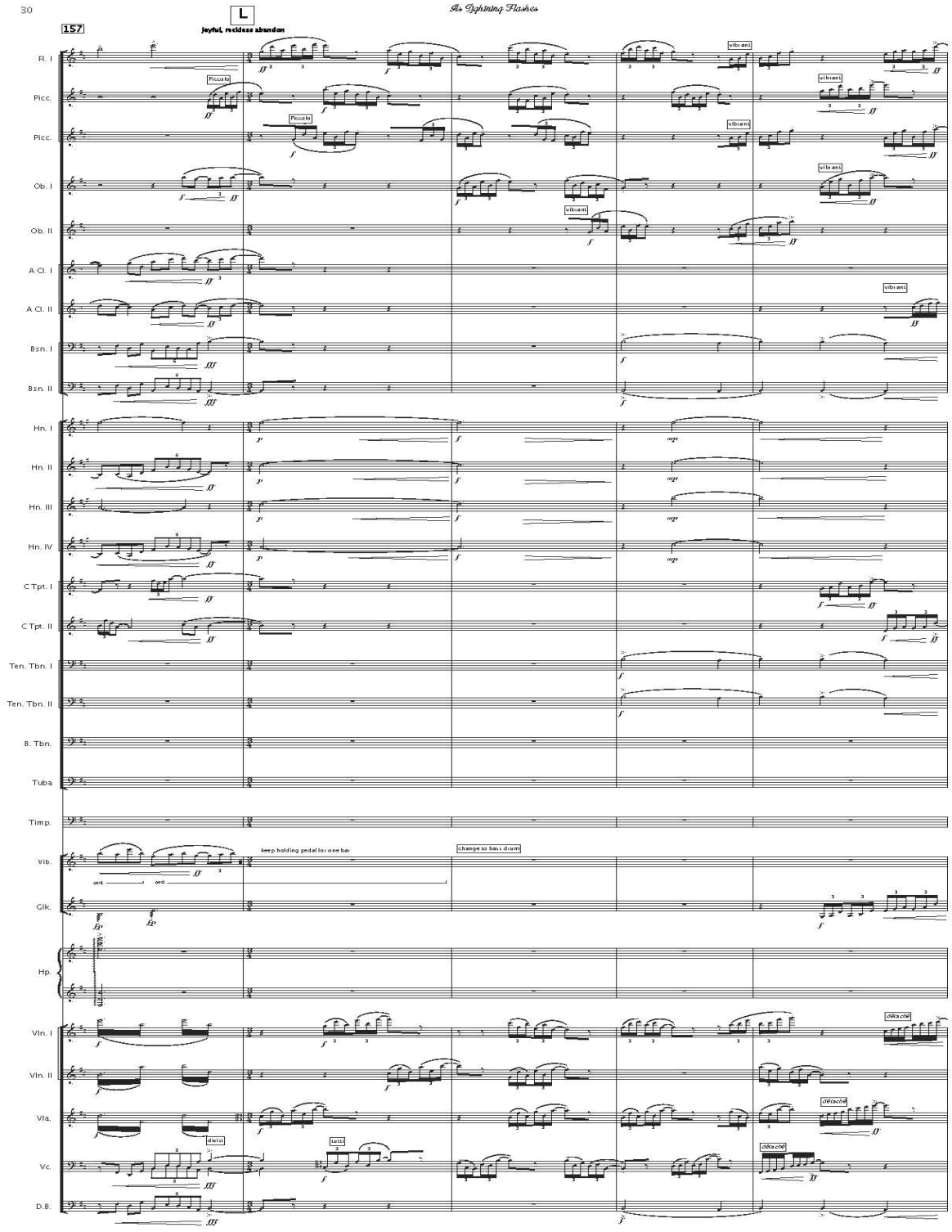

132
Fl. I
Fl. II
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. solo
Vln. I
Vln. II
Vla.
Vc.
D.B.

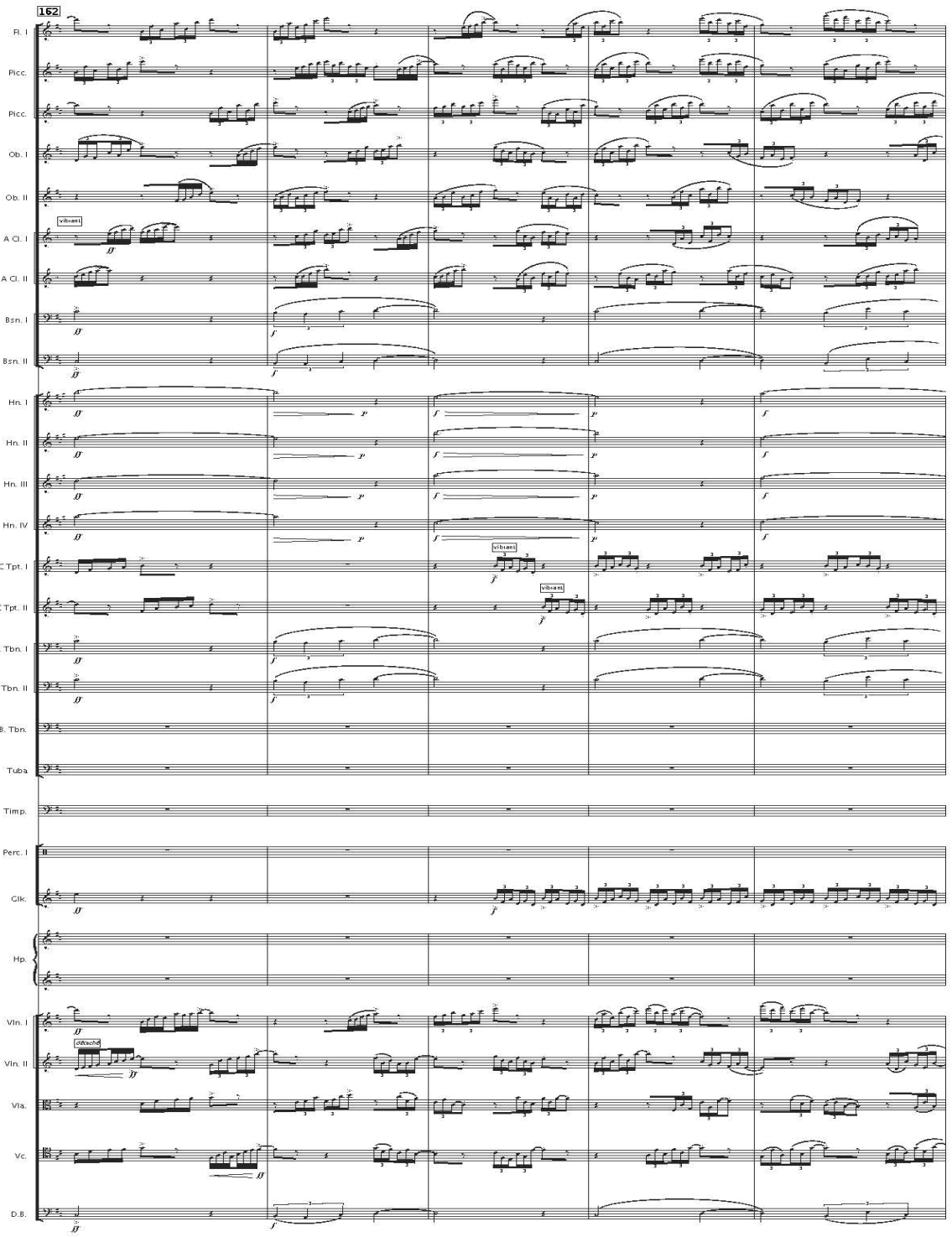

138
Fl. I
Fl. II
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Perc. II
Hp.
Vln. solo
Vln. I
Vln. II
Vla.
Vc.
D.B.
l.v.
ped.
f
sf
ff

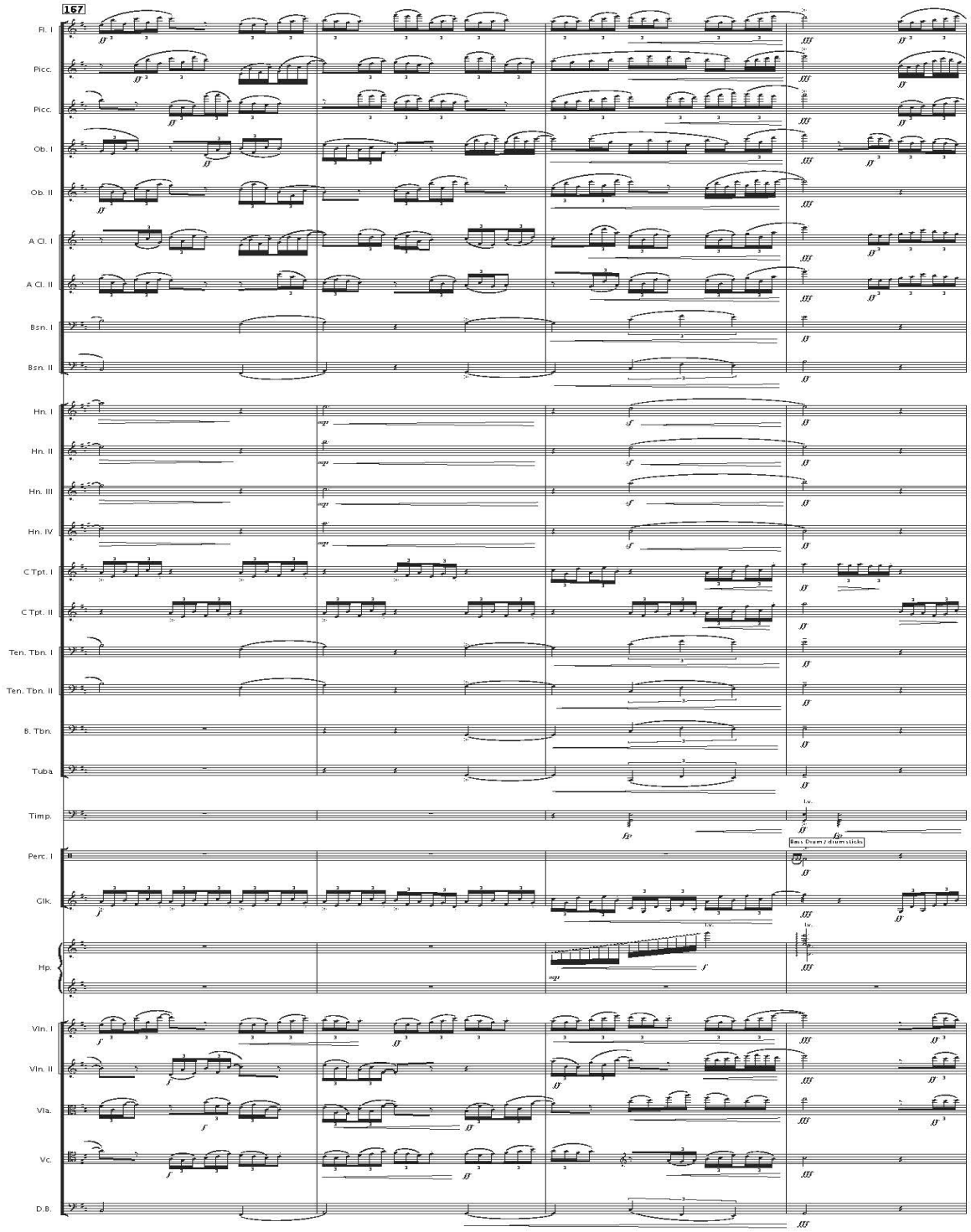

J
143
warm, expansive
Fl. I
Fl. II
Flute
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Vibraphone / medium rubber mallets
Glk.
glockenspiel / brass mallets
Hp.
Vln. solo
gli altri
Vln. I
tutti
Vln. II
Vla.
Vc.
D.B.

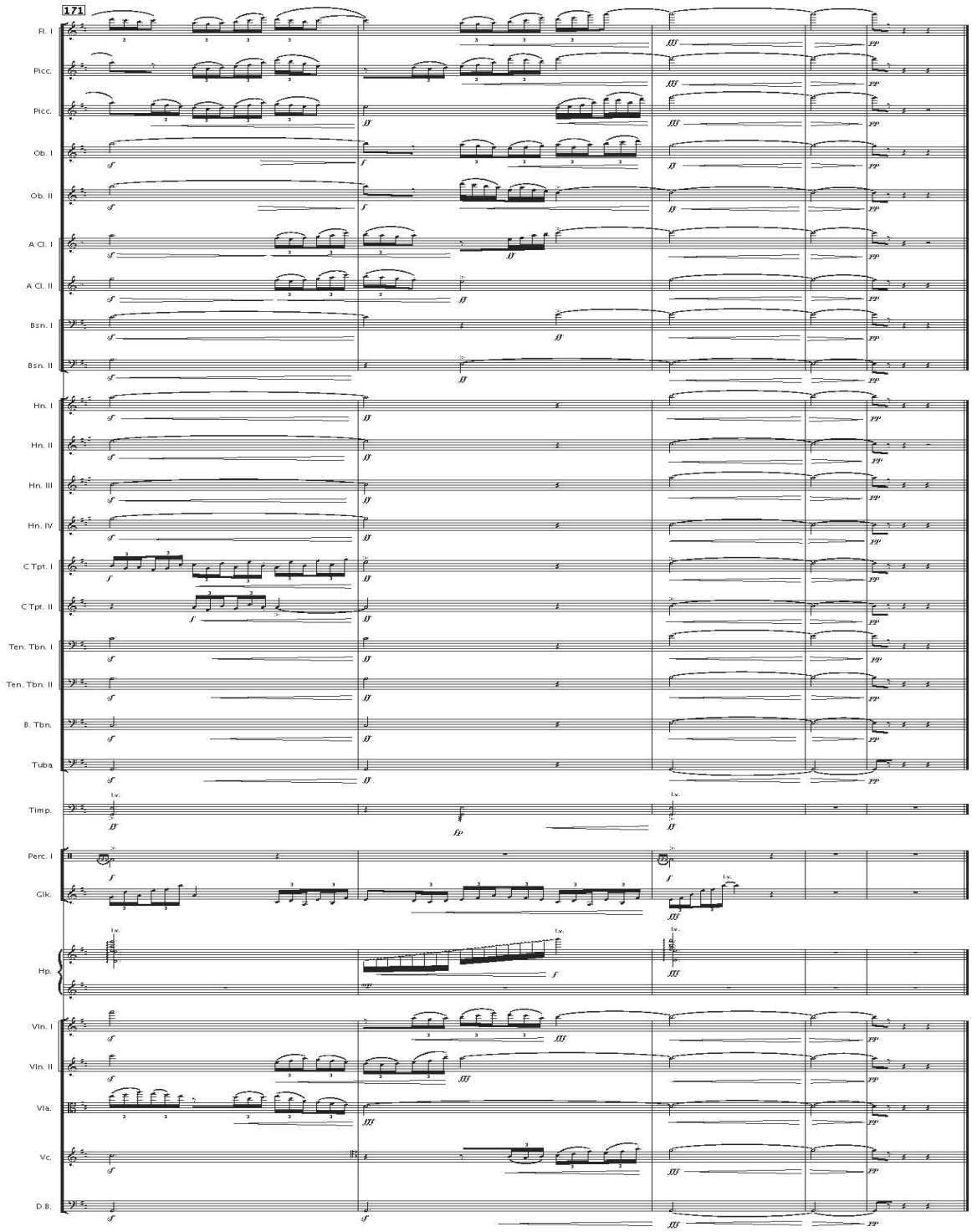

147
K
with growing intensity and anticipation
Fl. I
Fl. II
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Glk.
Hp.
Vln. solo
Vln. I
Vln. II
Vla.
Vc.
D.B.
change to picc.
lv.
let all notes ring
gli altri
senza sord. / ord.


152
Fl. I
Fl. II
Picc.
Ob. I
Ob. II
A.Cl. I
A.Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Glk.
Hp.
Vln. solo
Vln. I
Vln. II
Vla.
Vc.
D.B.
vibraes
vibraes
brass mallets
loco
tutti

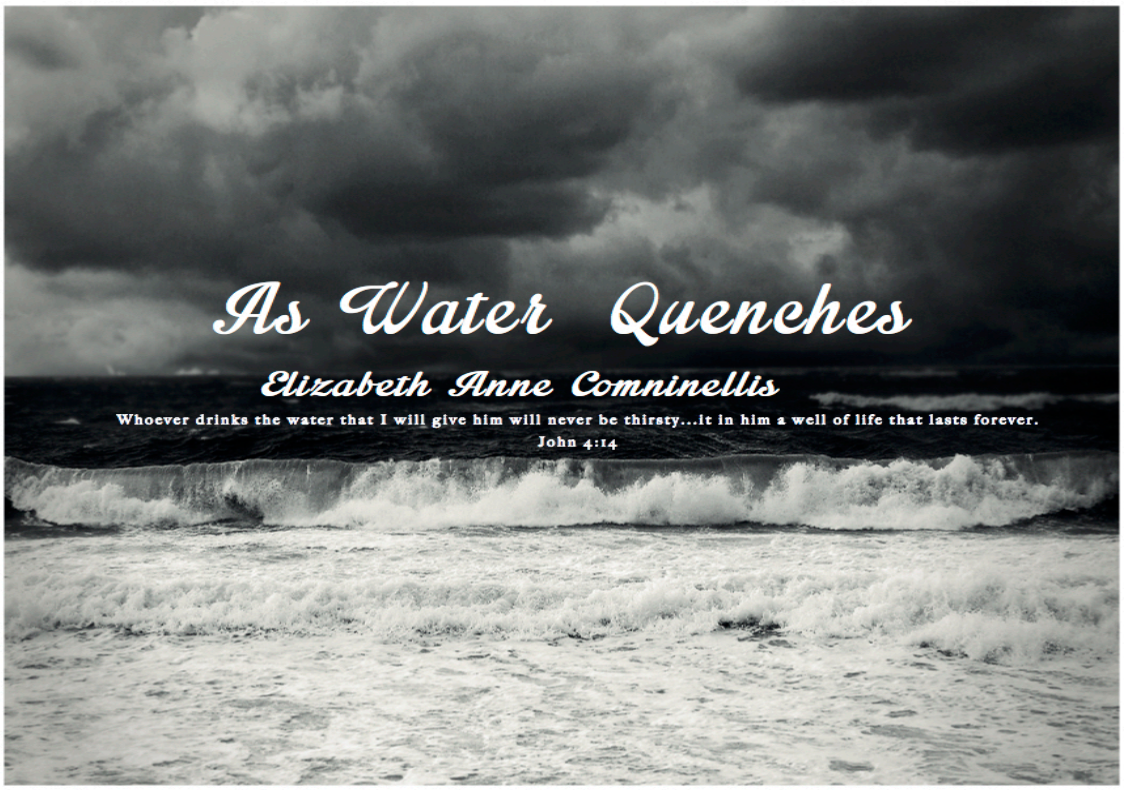

As Lightning Flashes
157
L
Joyful, reckless abandon
Fl. I
Picc.
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Vib.
Glk.
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.
Piccolo
vibrant
keep holding pedal for one bar
change to bass drum
ped.
détaché
div.
tutti


162
Fl. I
Picc.
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Perc. I
Glk.
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.
vibrant
vibrant
vibrant
vibrant
ff
f
p

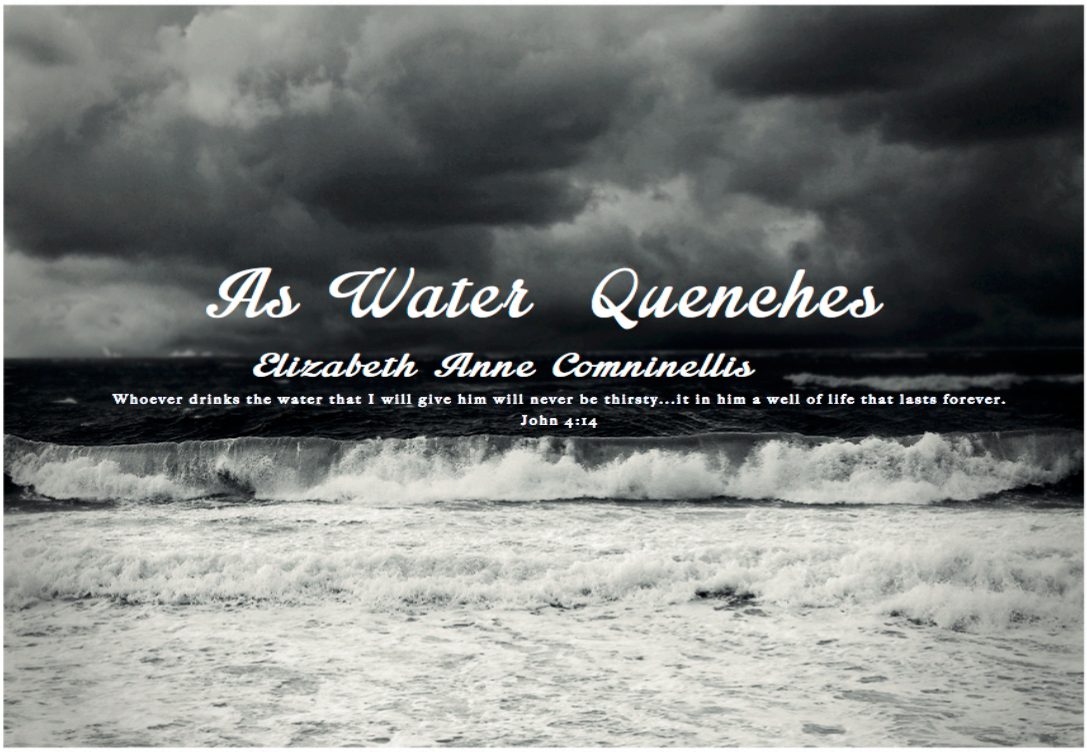

167
Fl. I
Picc.
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Perc. I
Glk.
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.
l.v.
Bass Drum / drum sticks


171
Fl. I
Picc.
Picc.
Ob. I
Ob. II
A Cl. I
A Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
C Tpt. I
C Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Perc. I
Glk.
Hp.
Vln. I
Vln. II
Vla.
Vc.
D.B.

Appendix B: *As Water Quenches* Score


As Water Quenches
Elizabeth Anne Comninellis
Whoever drinks the water that I will give him will never be thirsty...it in him a well of life that lasts forever.
John 4:14

Austin, 2017



Program Note

Water comes in many guises: as roaring torrents or still pools; as cascading waterfalls, roaring currents or graceful streams. It has an unpredictable and ever-changing life of its own, but in all its forms it also represents the most critical means by which life is sustained. Without it nearly every life form is eventually put to an end.

In this piece I explore many colors and rhythmic combinations to evoke water flowing at varying rates and levels of intensity. I use combinations of instruments to color the watery textures such as abruptly changing currents, gentle reservoirs, and falling droplets. I focus especially on timbre and instrumental combinations to build contrasting colors. In some instances, many instruments are grouped into the same register with symmetrical and asymmetrical rhythmic patterns overlapping. These create subtle form of confusion- like gentle currents colliding each independently moving on its own path.

I also explore dry and wet combinations of color in the orchestra. For example, a long high sustain accompanied by fragmented rhythmic textures in short articulation.

The piece ends with the image of everlasting water- water which is eternally satisfying, water that need not be consumed again and again. The piece ends with a serene and colorful melody in the violins meant to leave the audience with the sense of peace and satisfaction described in the above text.

Duration: 11 minutes

Instrumentation

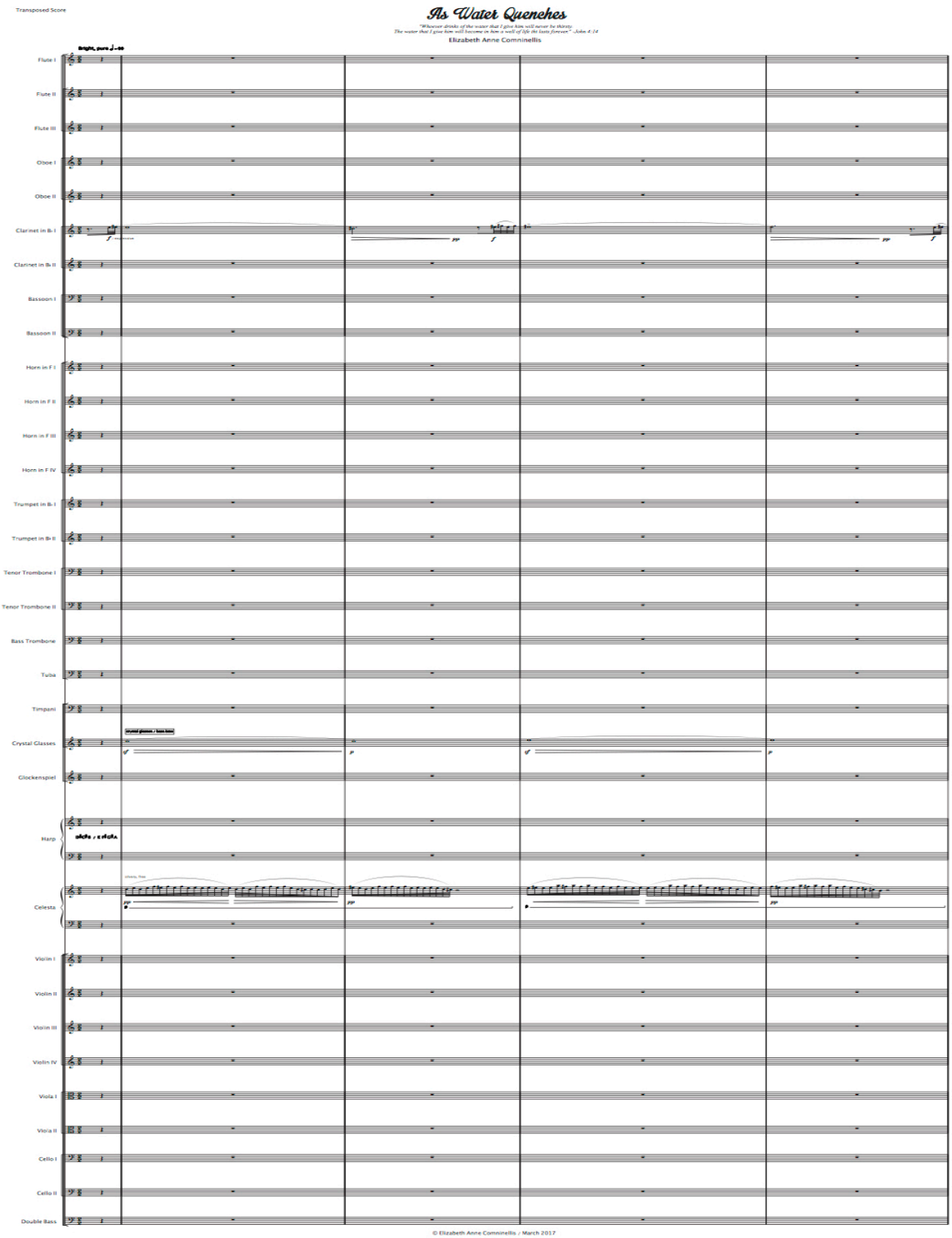
3 flutes (fl. 2 & 3 double on piccolo)
2 oboes (ob. 2 double on english horn)
2 clarinets in B-flat
2 bassoons

4 horns in F
2 trumpets in b-flat
2 trombones
bass trombone
tuba

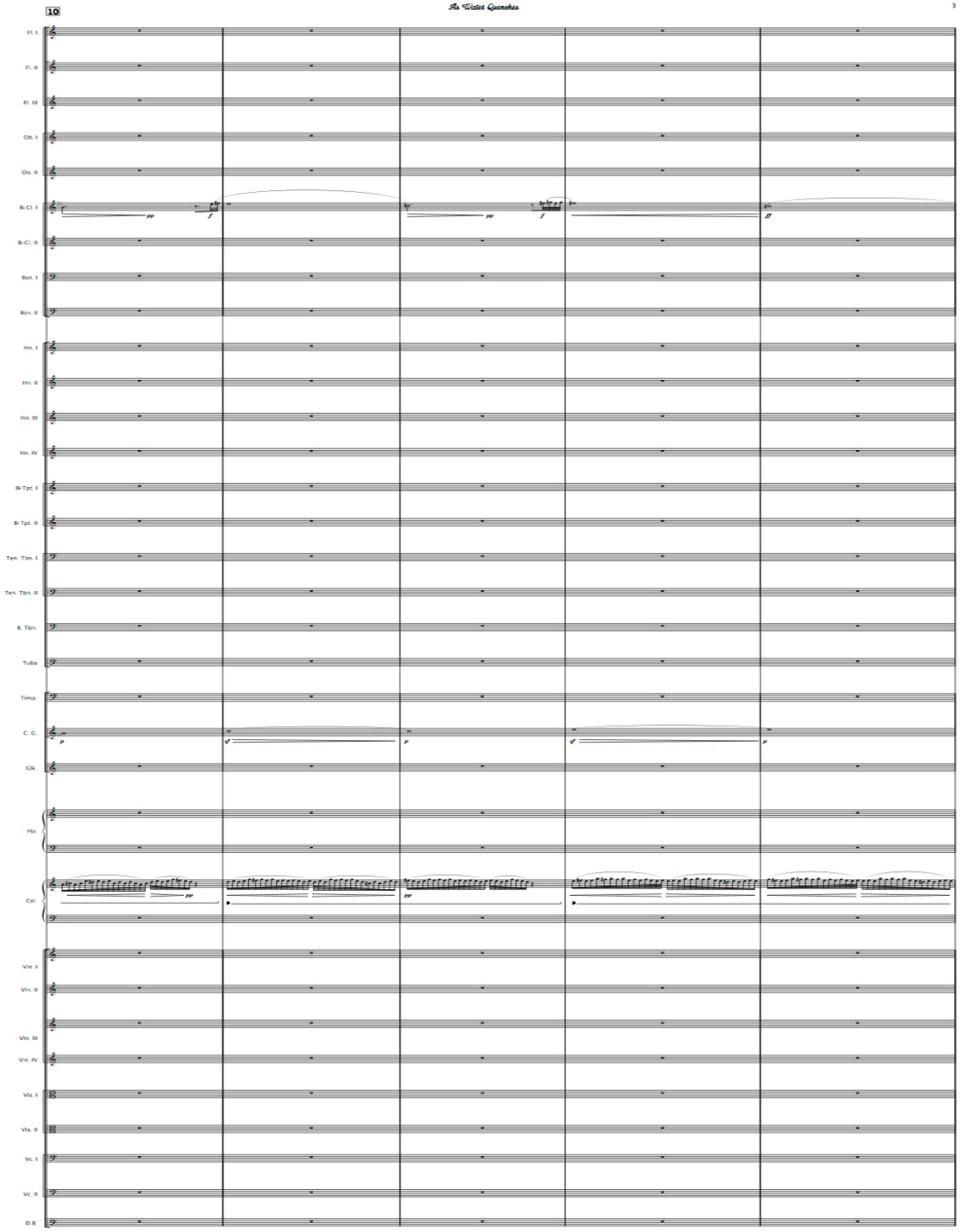
timpani
2 percussion:
I: crystal glasses, chimes, glockenspiel (shared)
II: vibraphone, glockenspiel (shared), bass drum

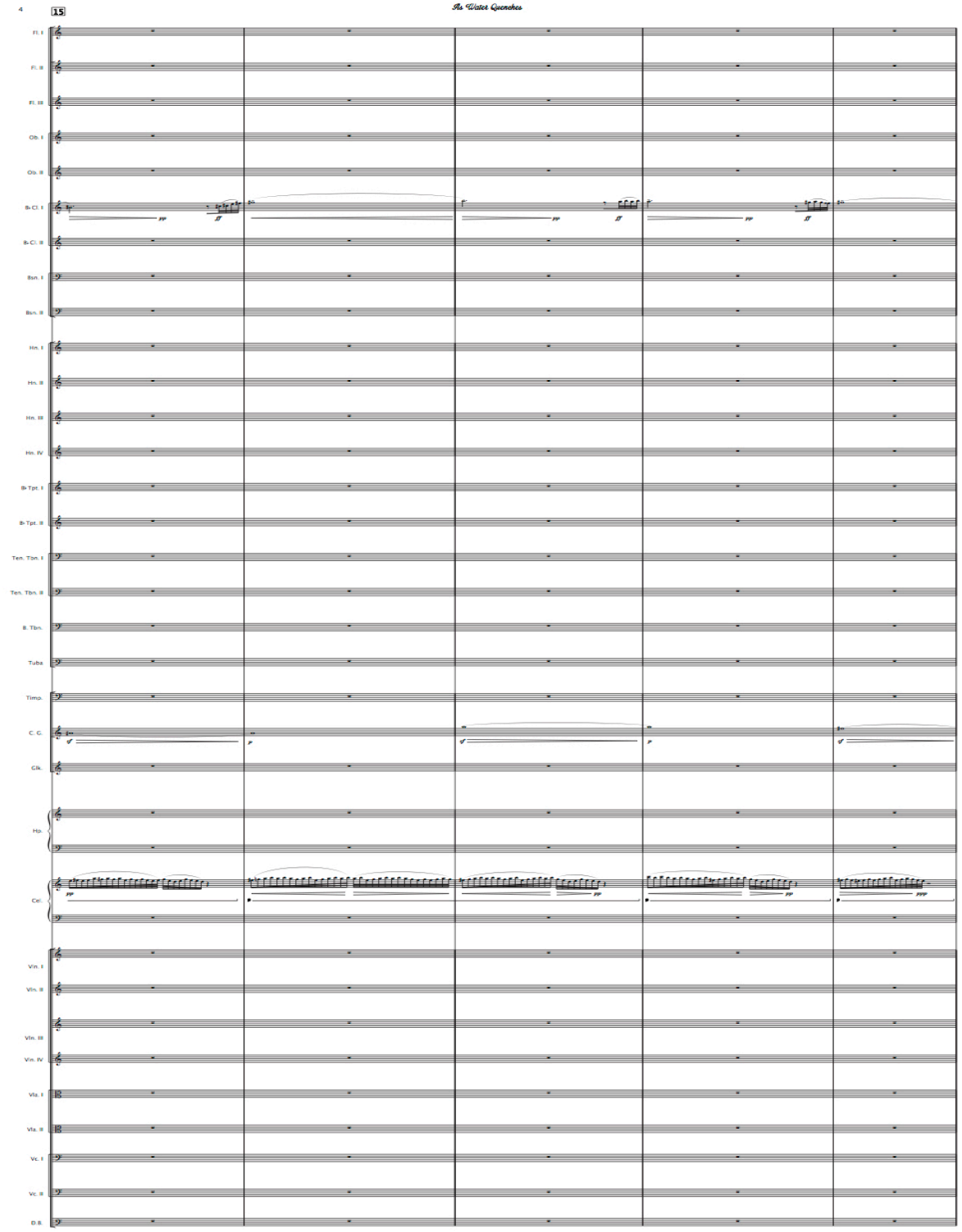
1 or 2 harps (doubling a single part)*

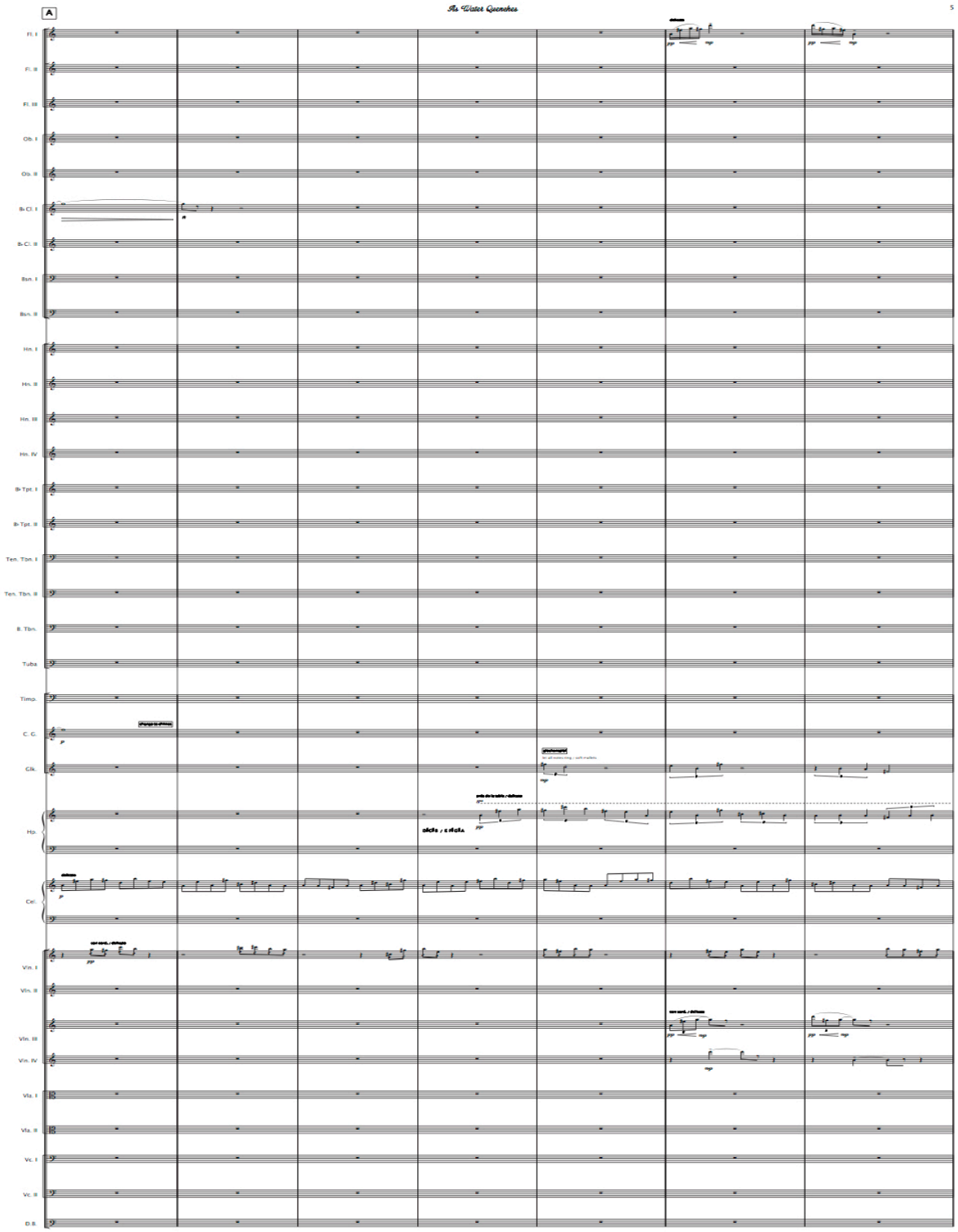
Violin I (12)
Violin II (12)
Viola (12)
Cellos (12)
Double Bass (8)

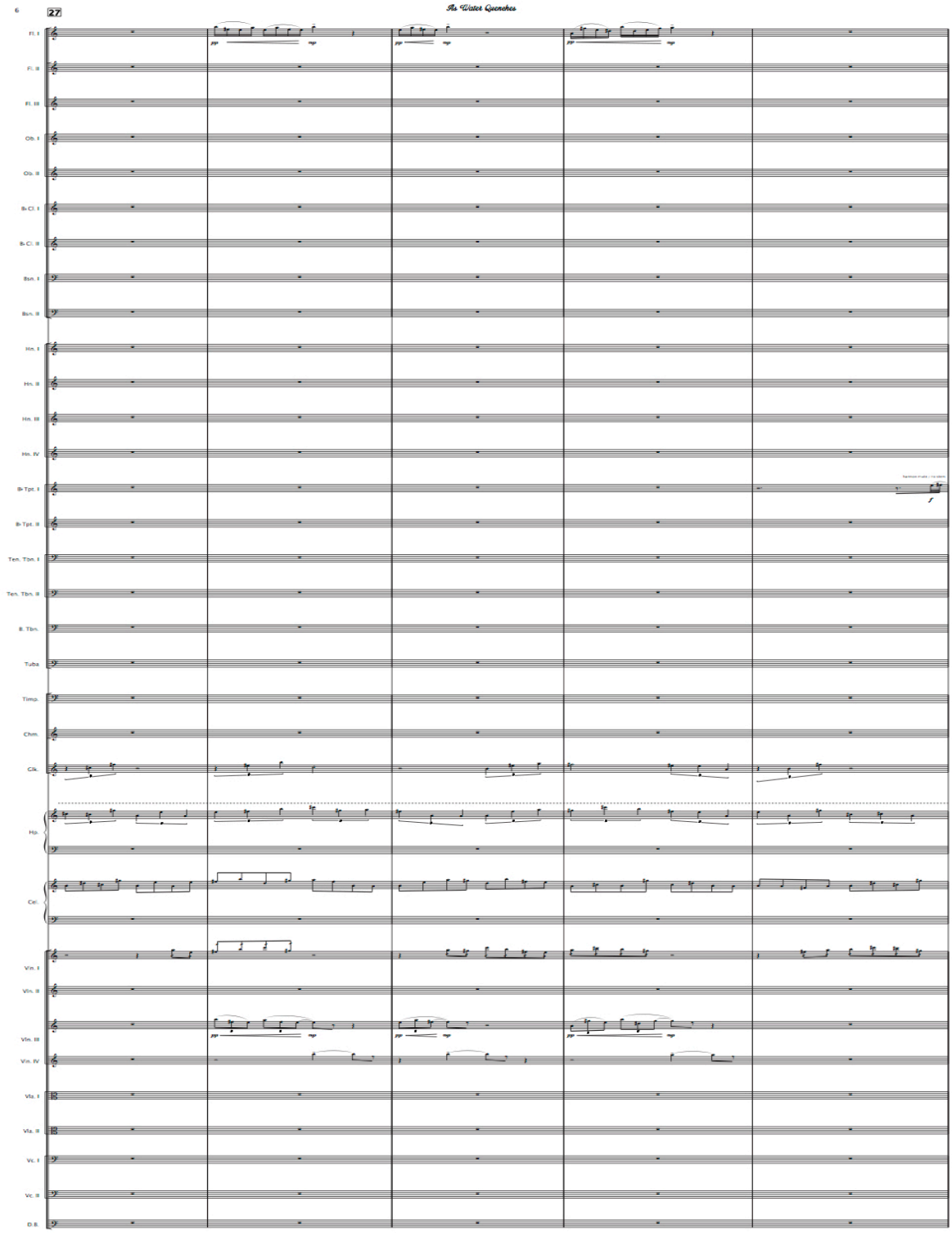

Transposed Score
As Water Quenches
"Whoever drinks of the water that I give him will never be thirsty.
The water that I give him will become in him a well of life He lasts forever." -John 4:14
Elizabeth Anne Comninellis
Bright, pure ♩=60
Flute I
Flute II
Flute III
Oboe I
Oboe II
Clarinet in B♭ I
Clarinet in B♭ II
Bassoon I
Bassoon II
Horn in F I
Horn in F II
Horn in F III
Horn in F IV
Trumpet in B♭ I
Trumpet in B♭ II
Tenor Trombone I
Tenor Trombone II
Bass Trombone
Tuba
Timpani
Crystal Glasses
Glockenspiel
Harp
Celesta
Violin I
Violin II
Violin III
Violin IV
Viola I
Viola II
Cello I
Cello II
Double Bass
© Elizabeth Anne Comninellis / March 2017

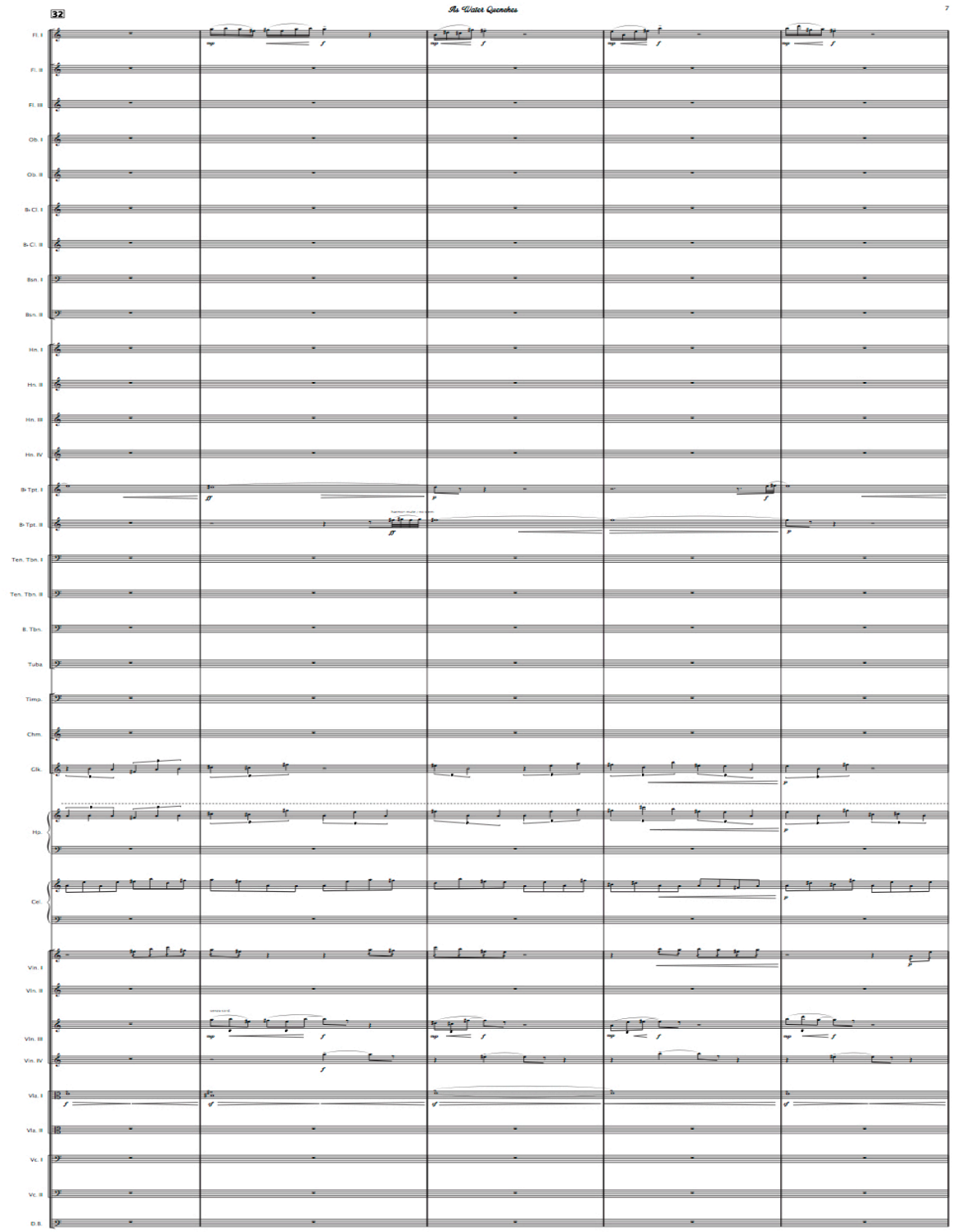
2
As Water Quenches
5
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. G.
Glk.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

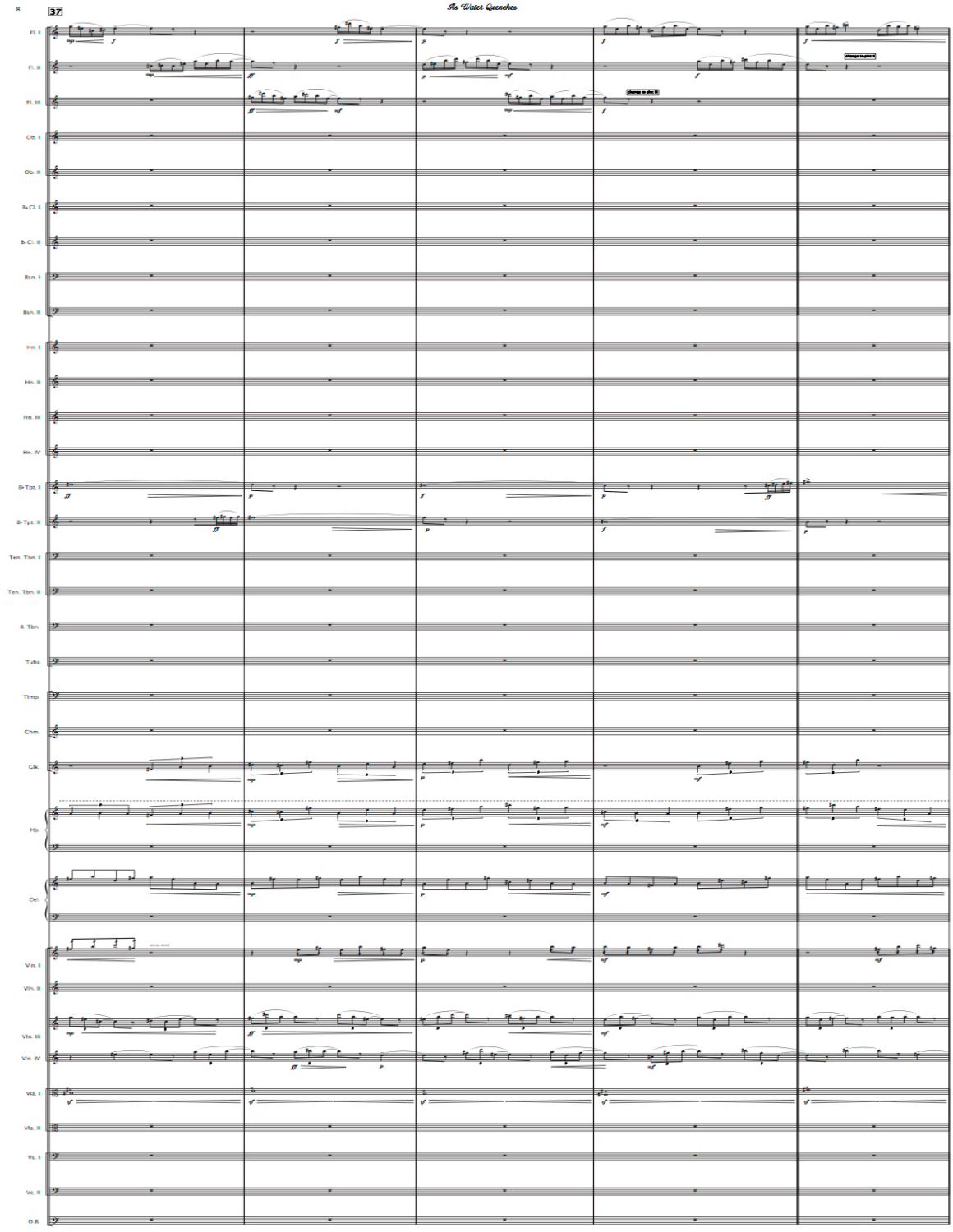

10
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. G.
Glk.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

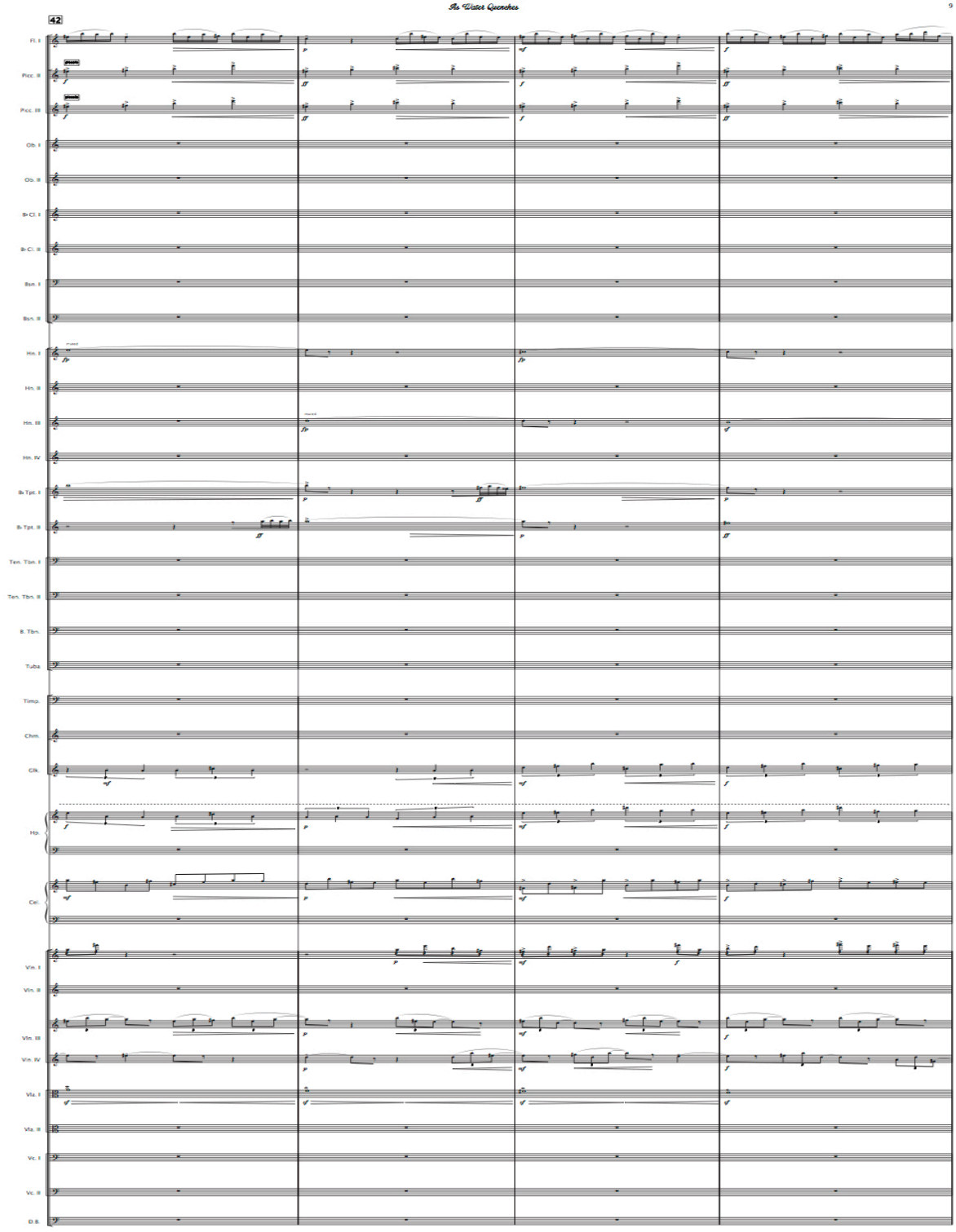

4
15
The Water Quenches
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. G.
Glk.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

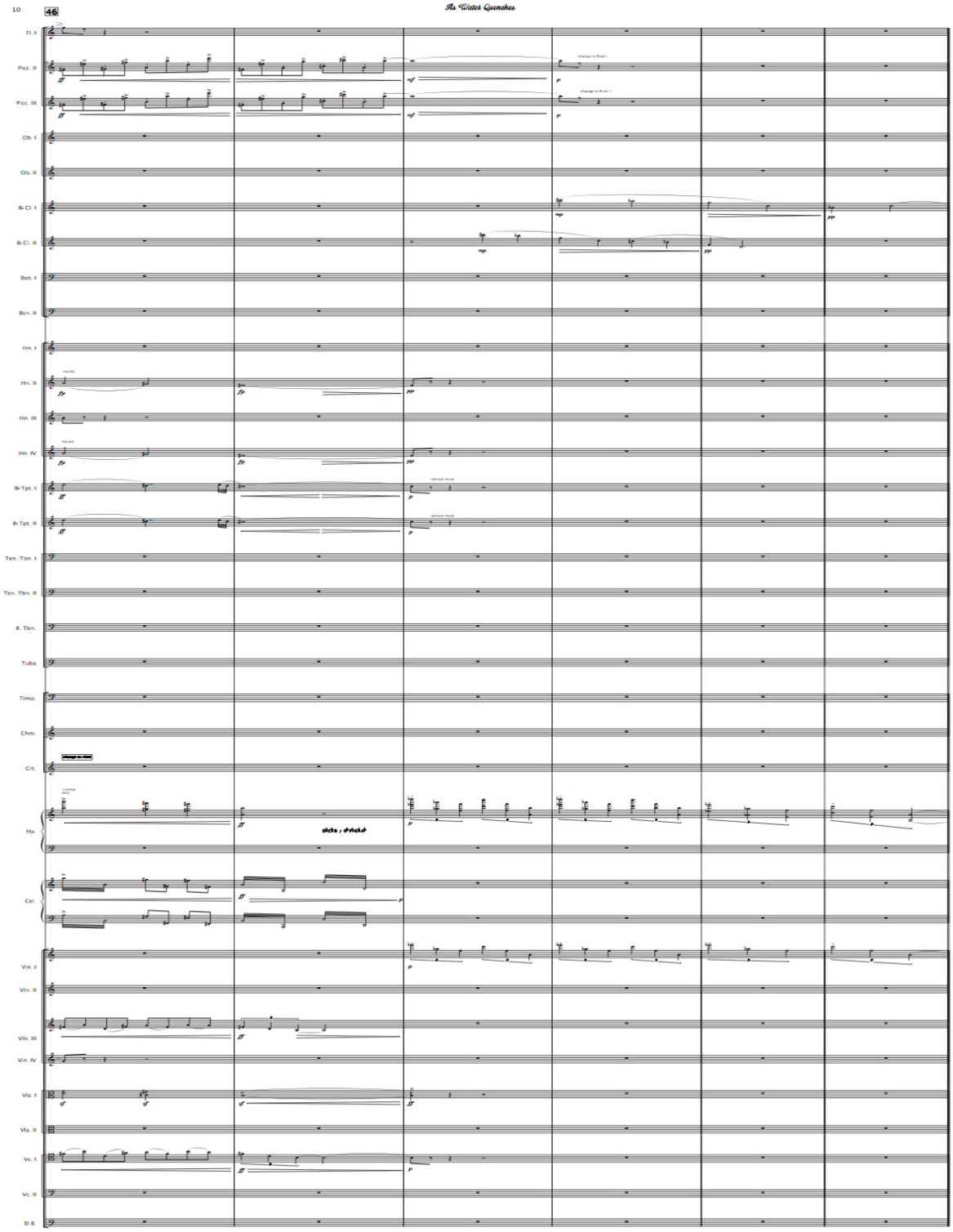

As Water Quenches
5
A
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. G.
Glk.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

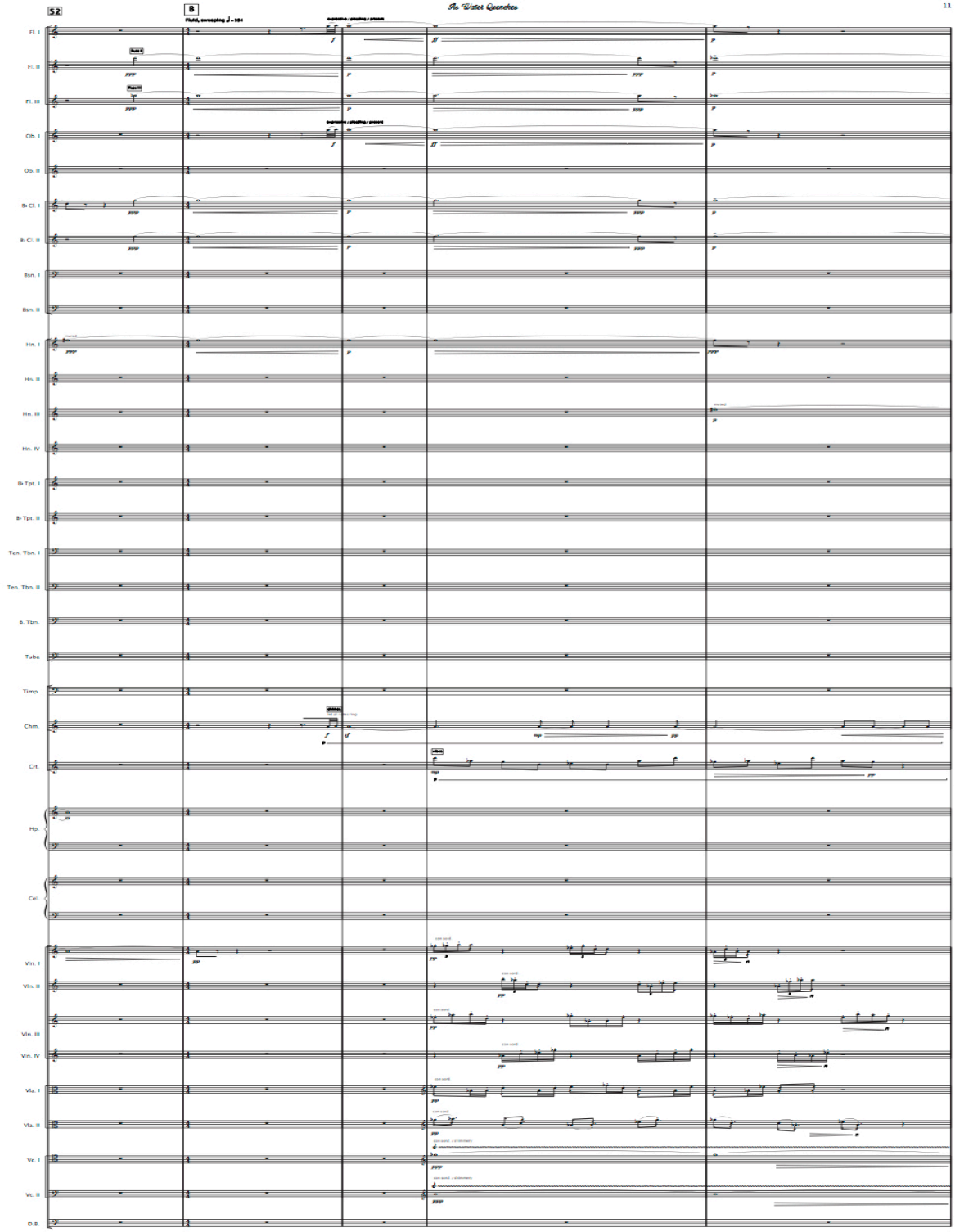

6
27
As Water Quenches
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Glk.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

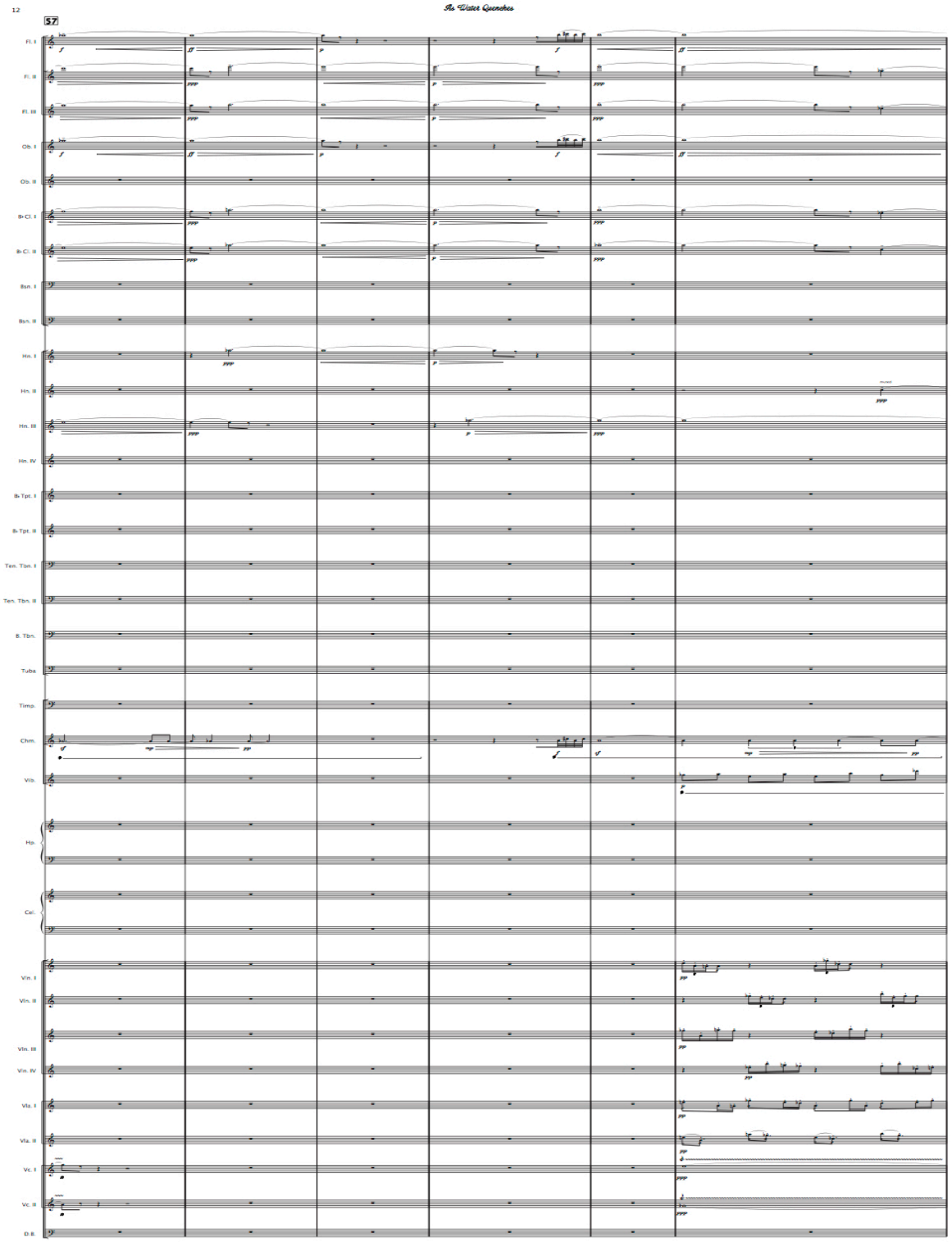

32
As Water Quenches
7
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Glk.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

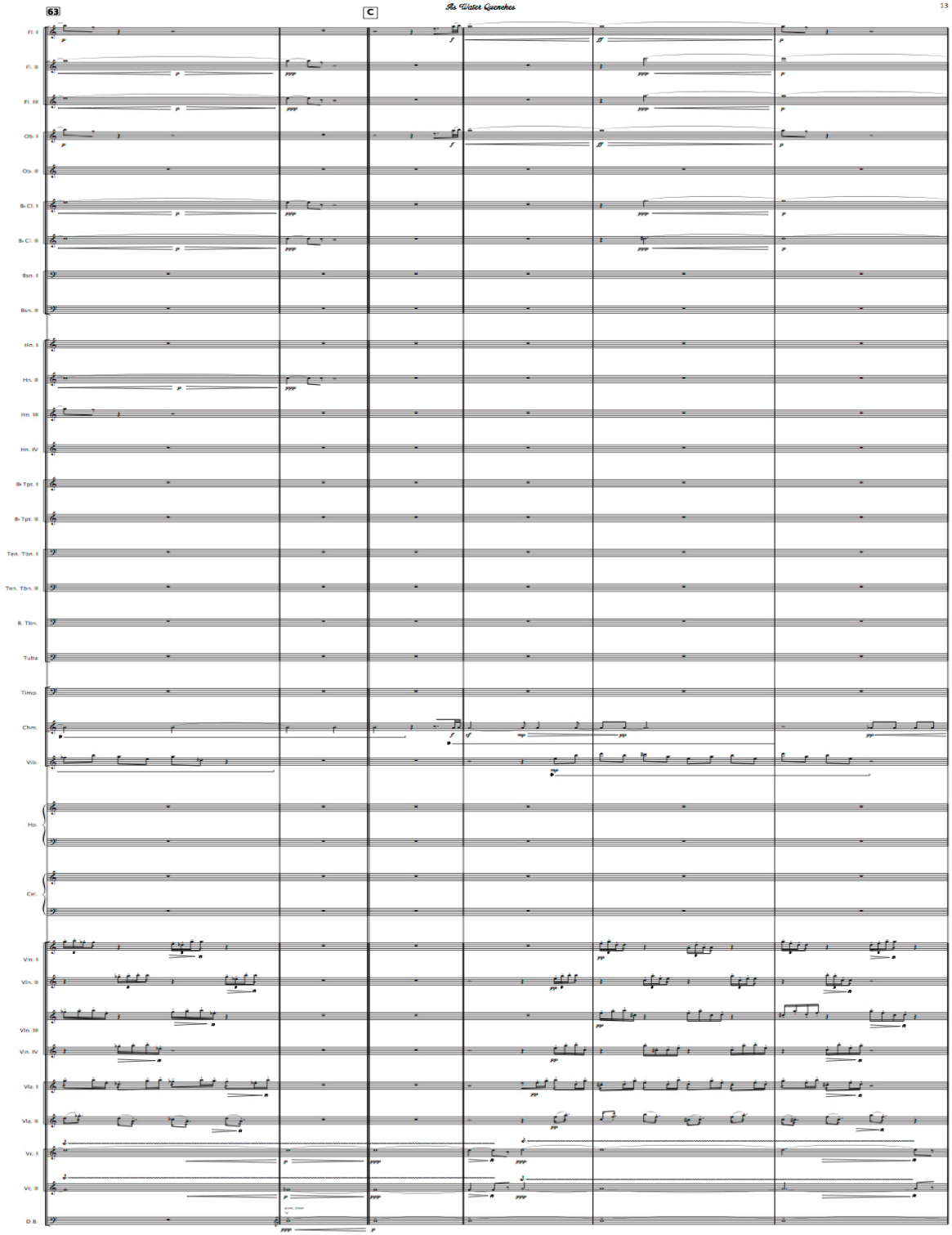

As Water Quenches
37
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Glk.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

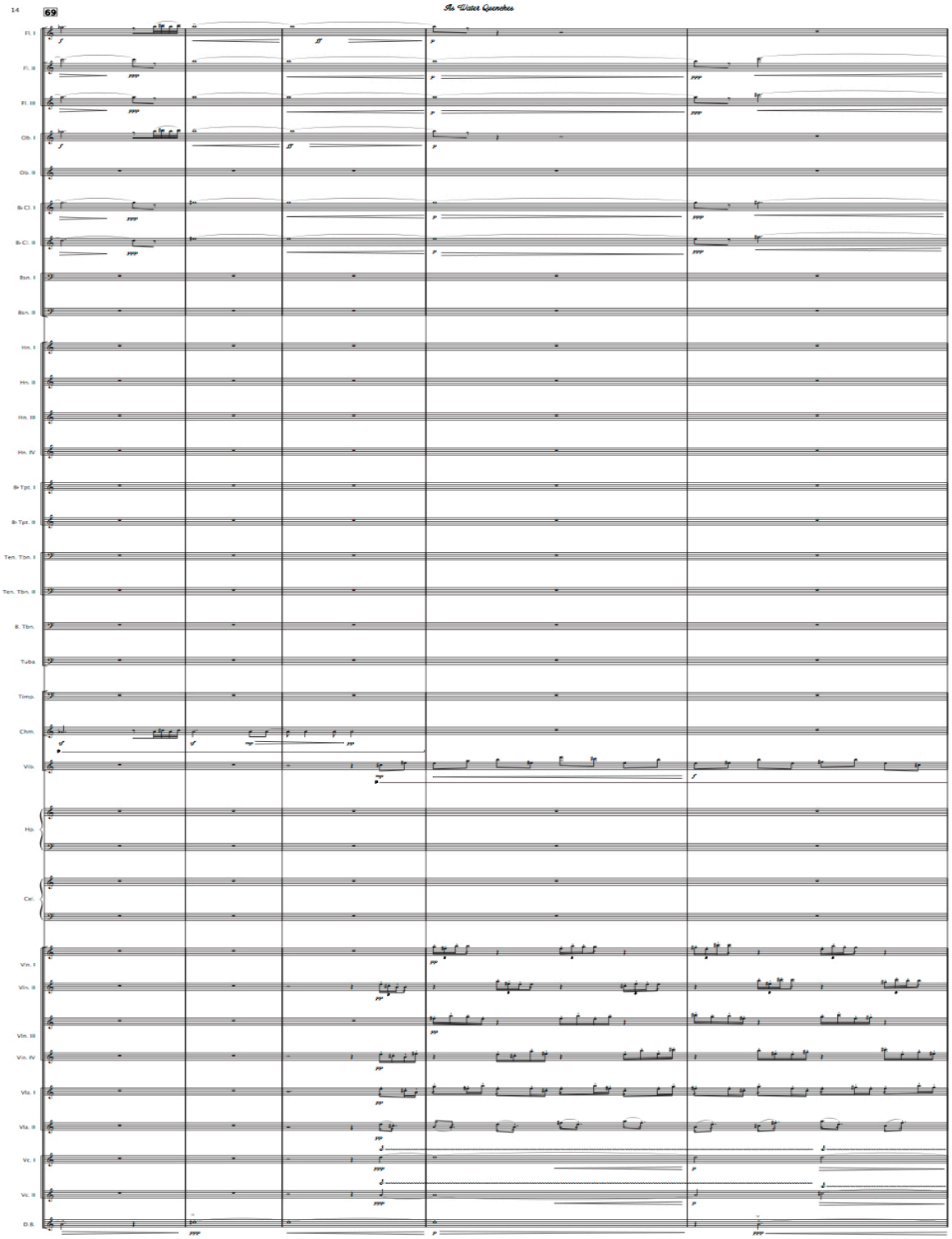

42
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Glk.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

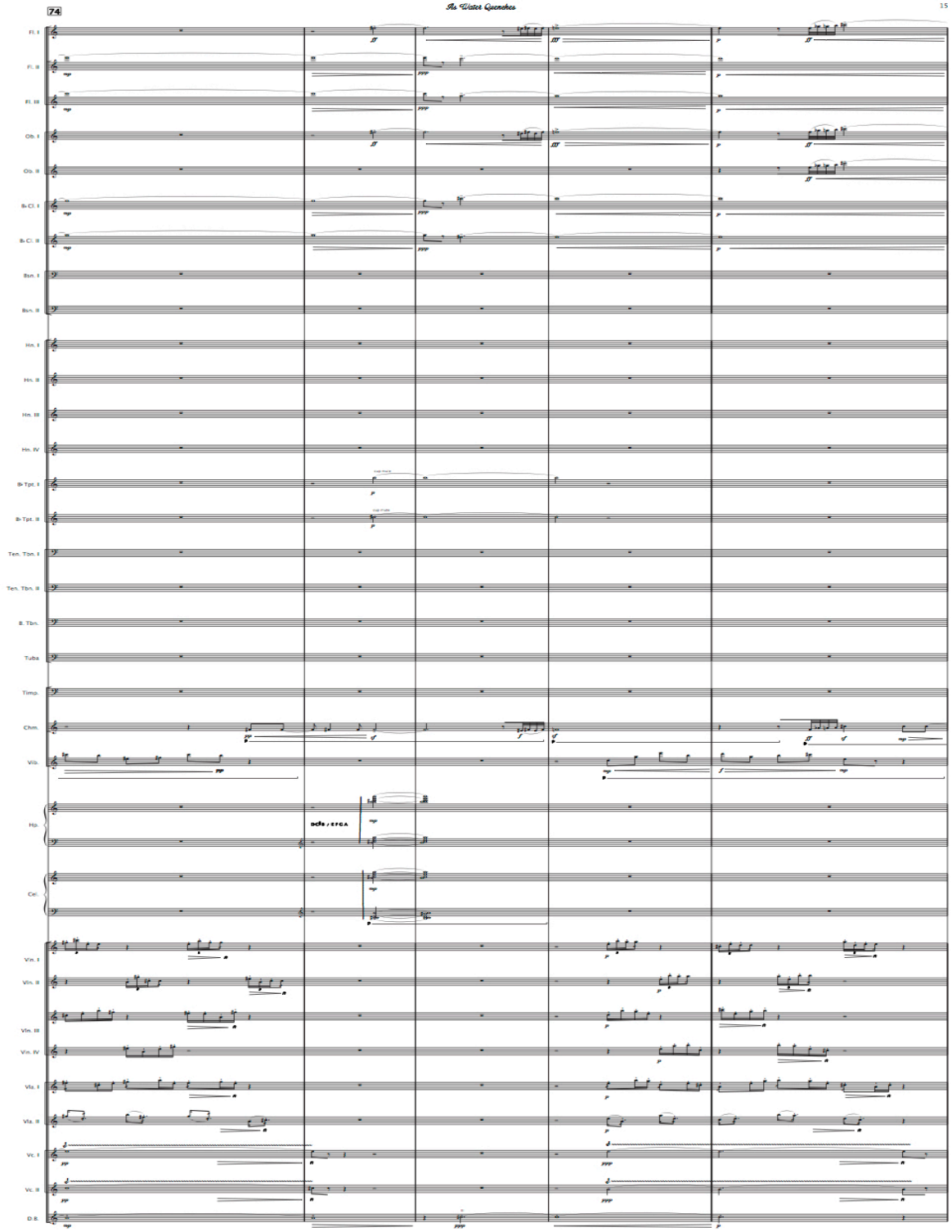

10
46
As Water Quenches
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Crt.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

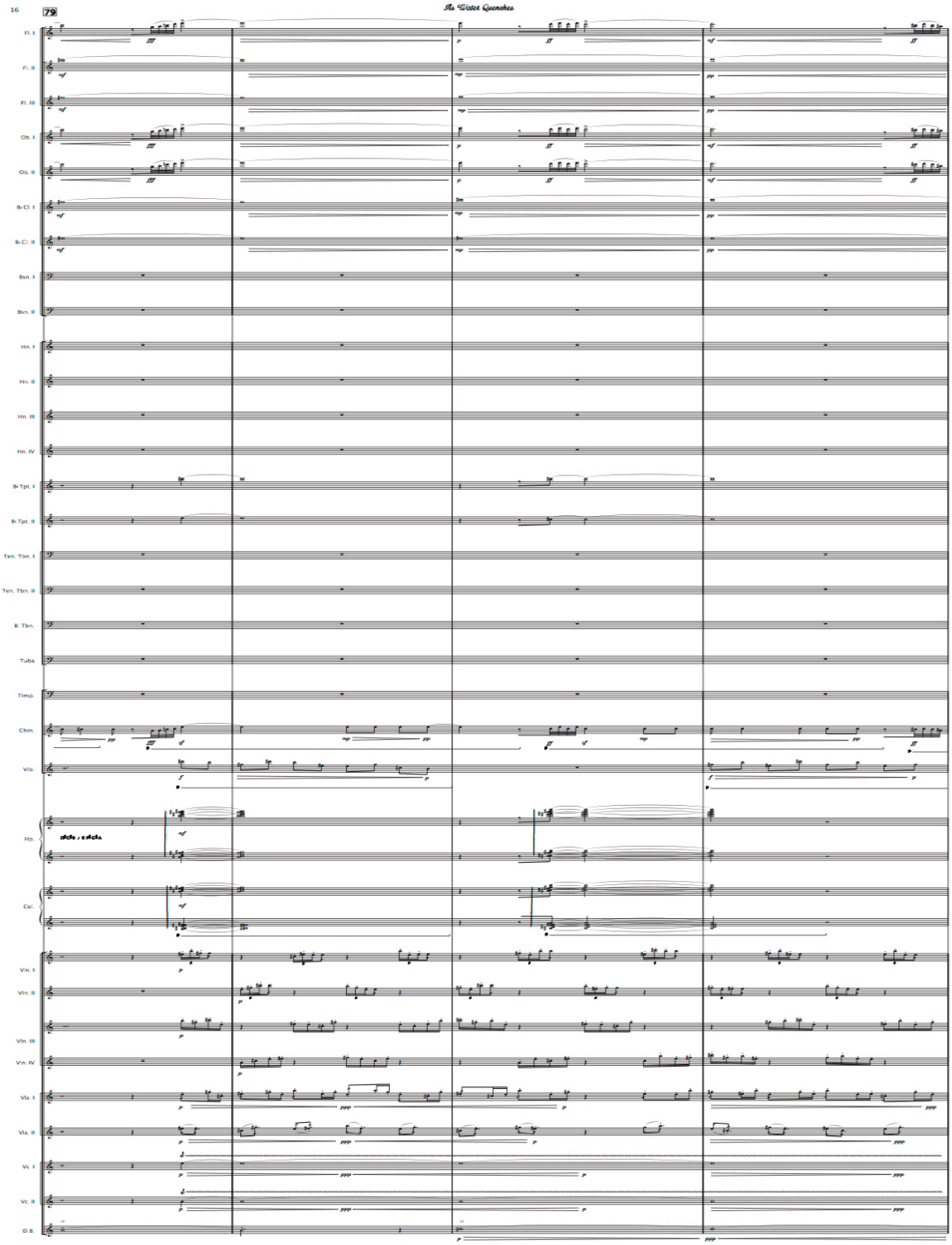

52
B
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
C-t.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

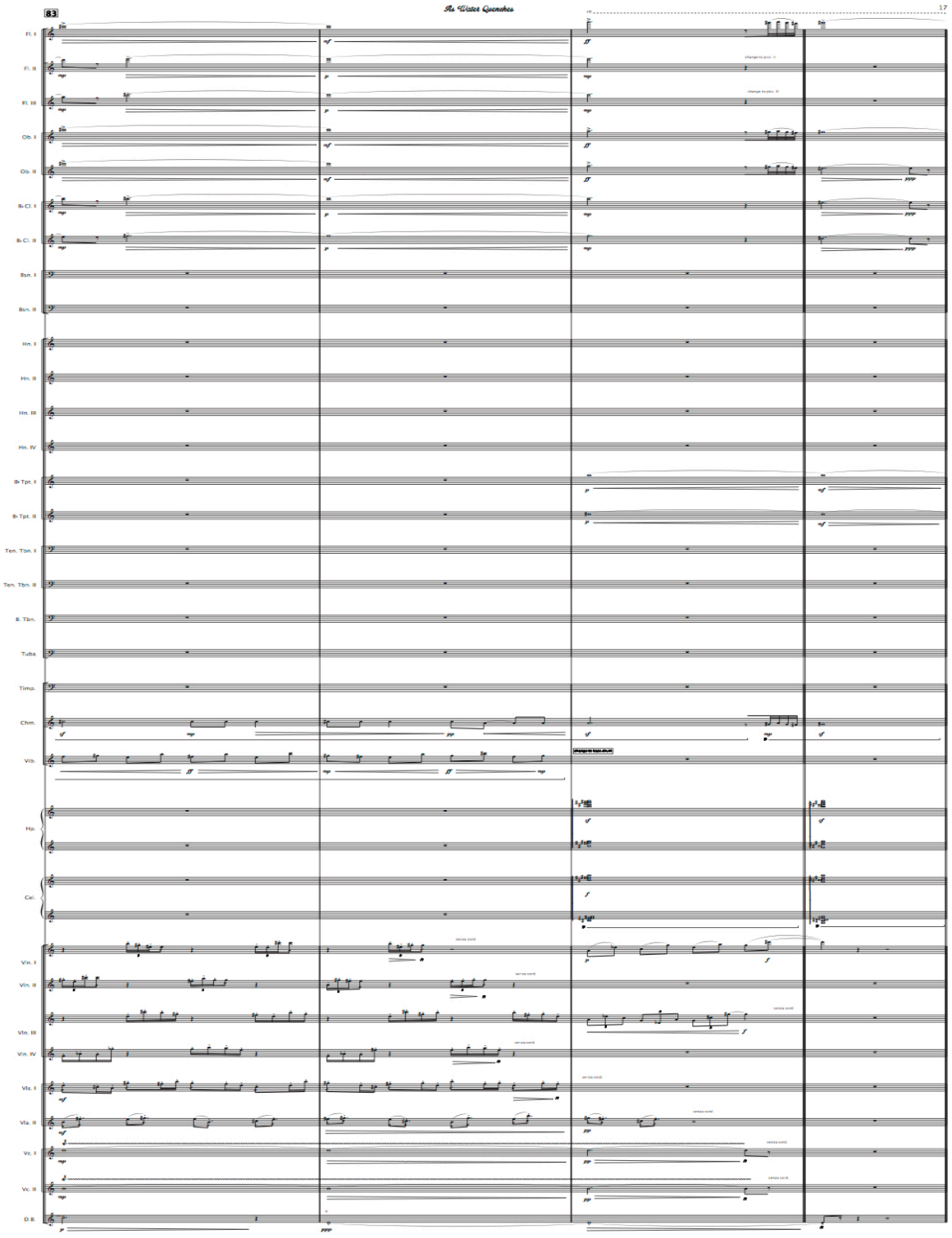

As Water Quenches
57
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


63
C
As Water Quenches
13
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

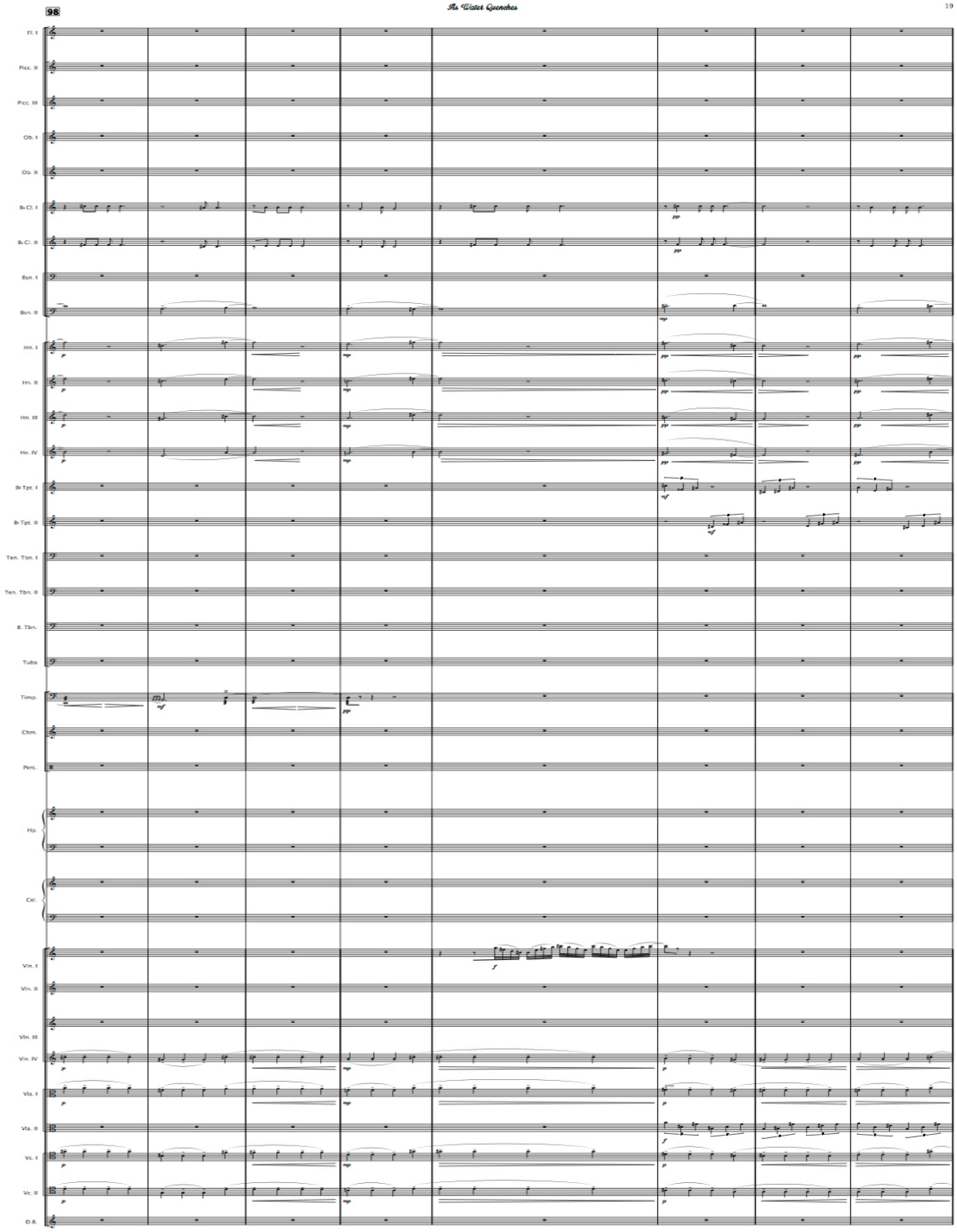

14
69
As Water Quenches
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

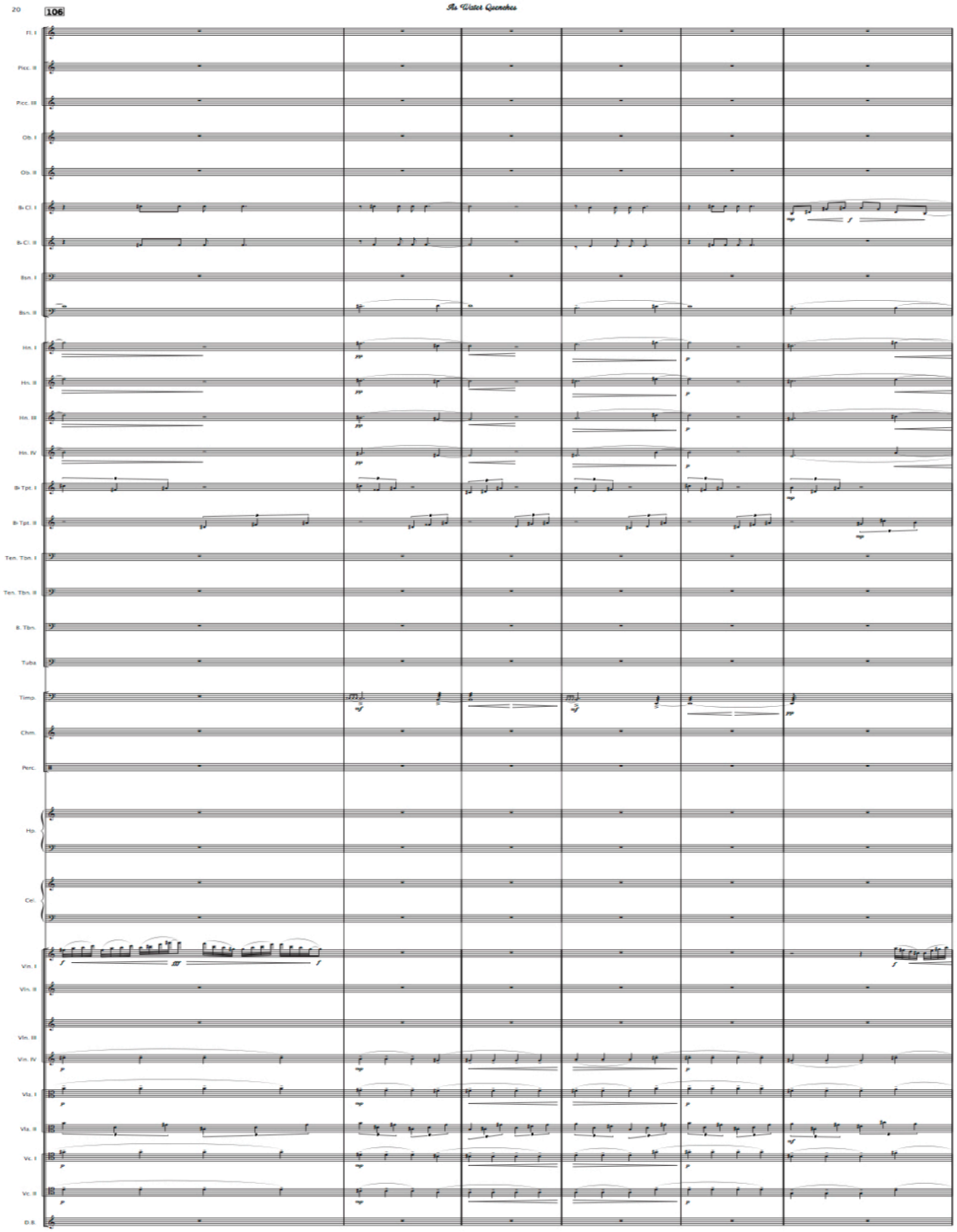

74
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

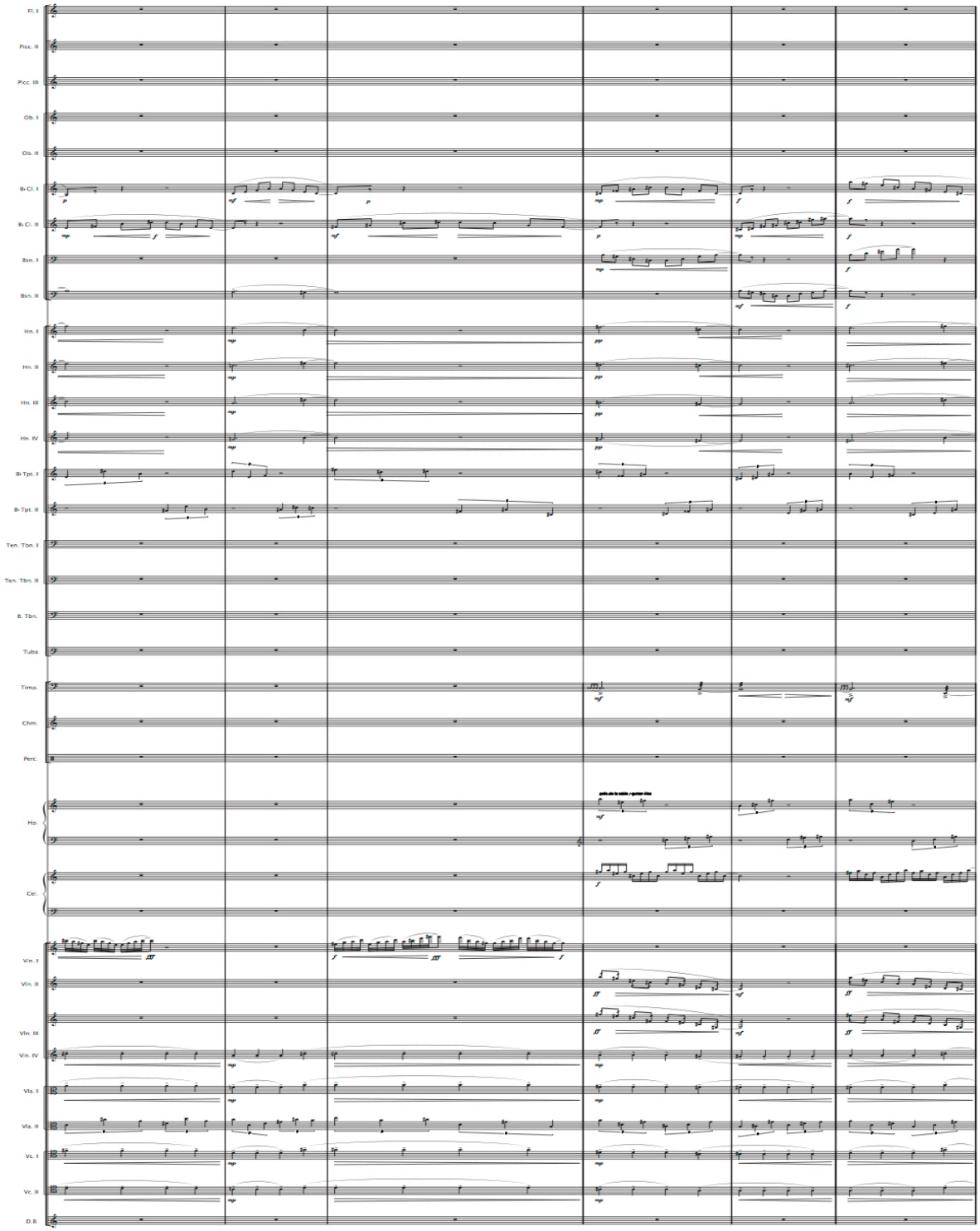

16
79
As Water Quenches
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

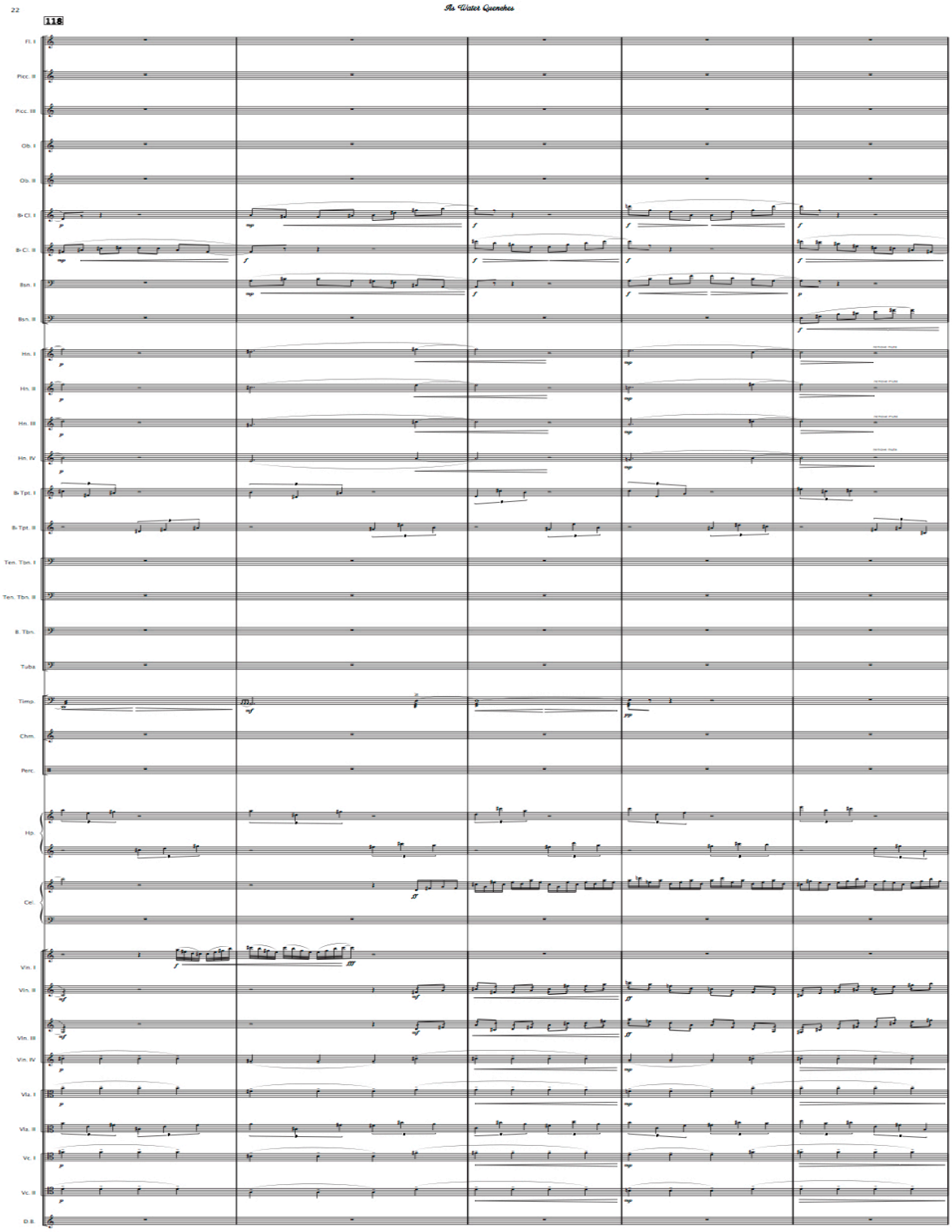

83
As Water Quenches
17
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

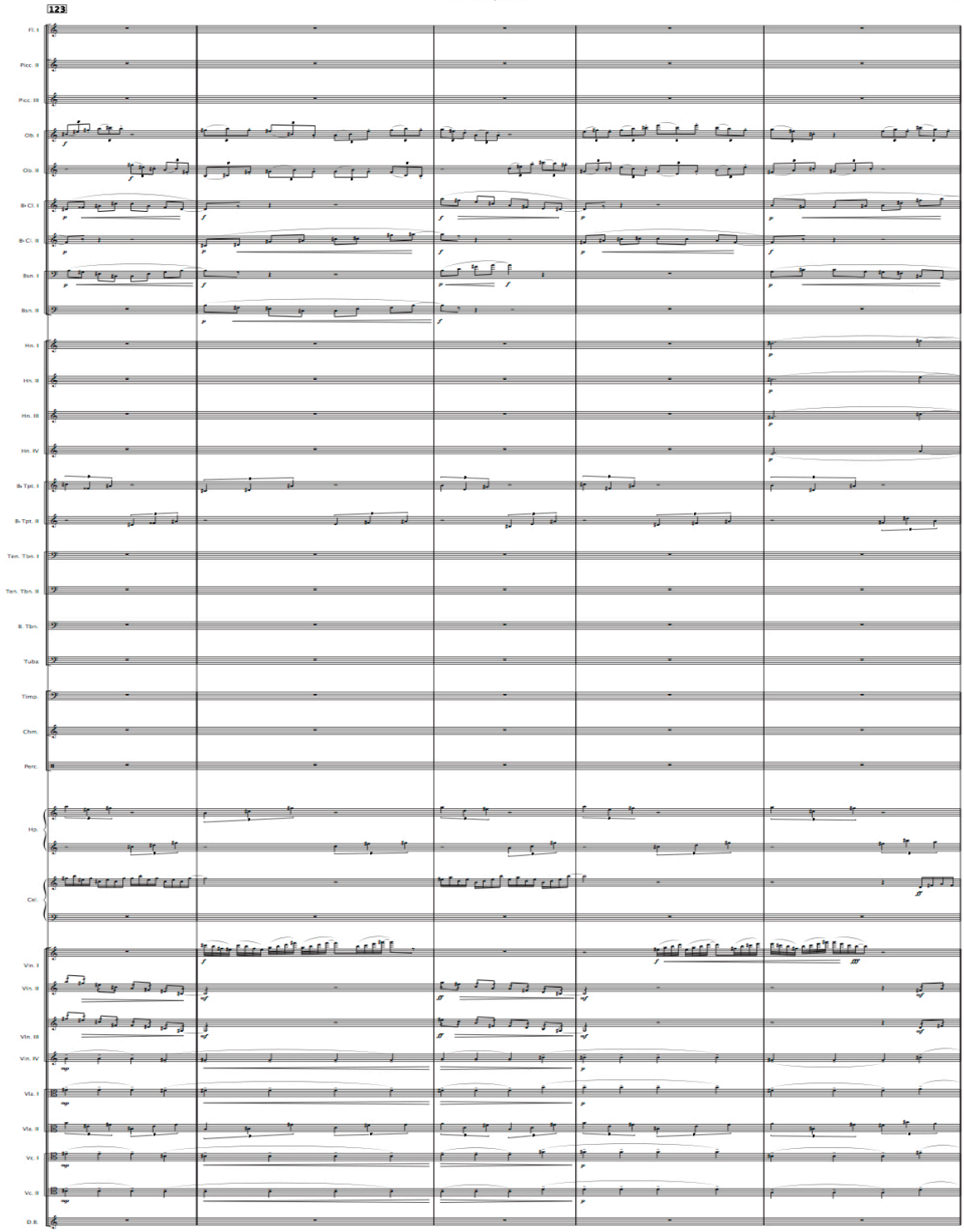
18
D
Fluid, sweeping ♩= 120
As Water Quenches
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Perc.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

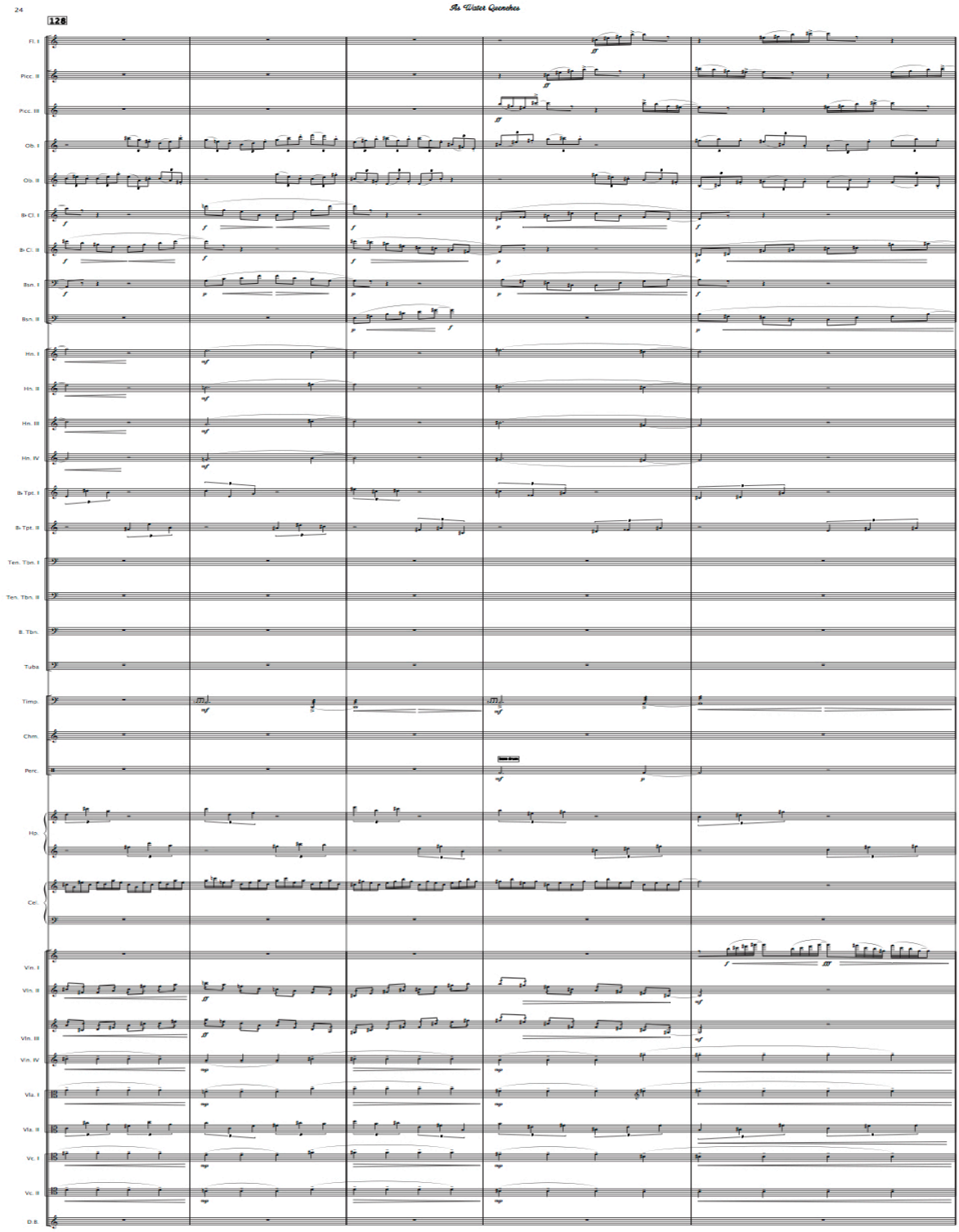

98
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Perc.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

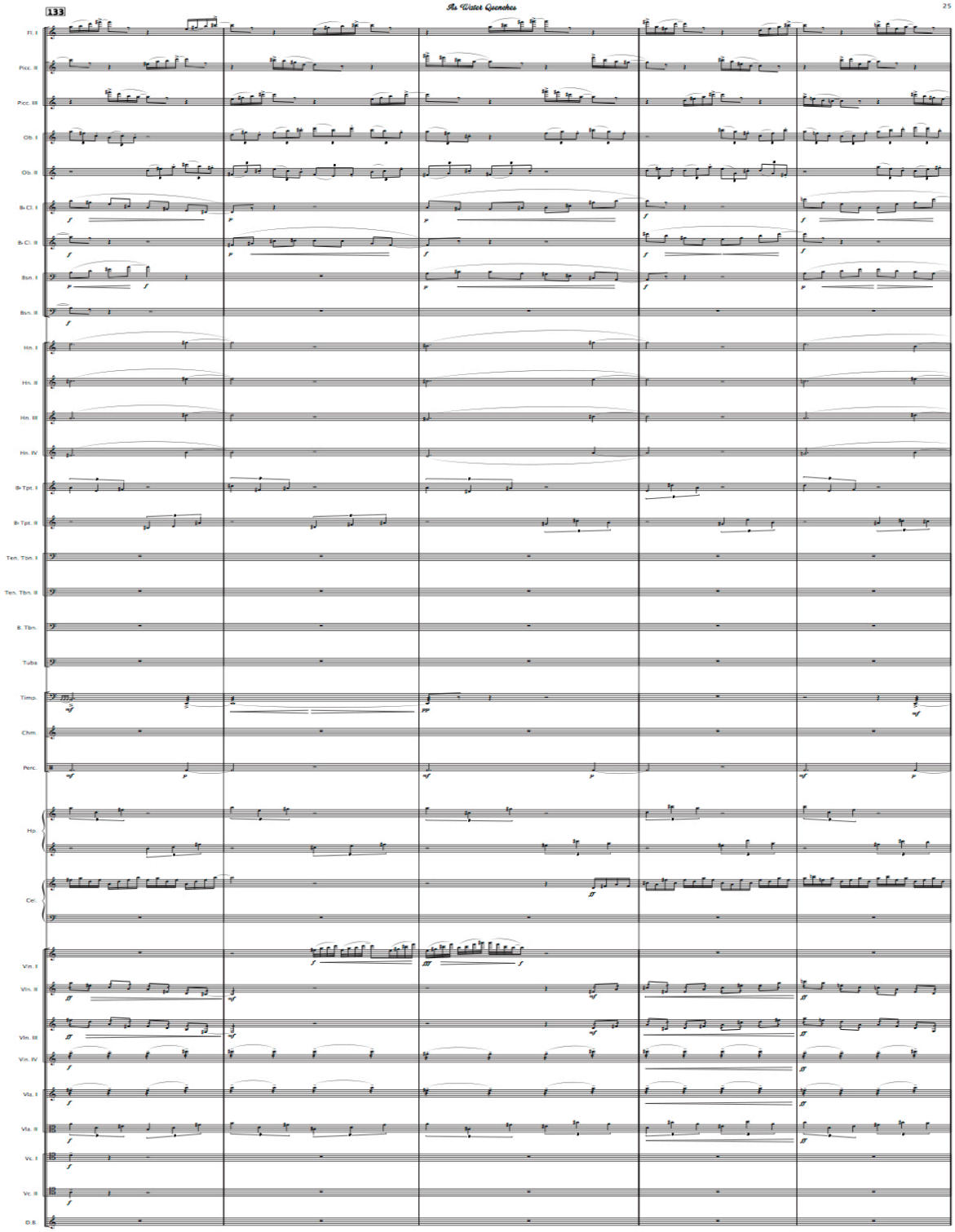

106
As Water Quenches
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Perc.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

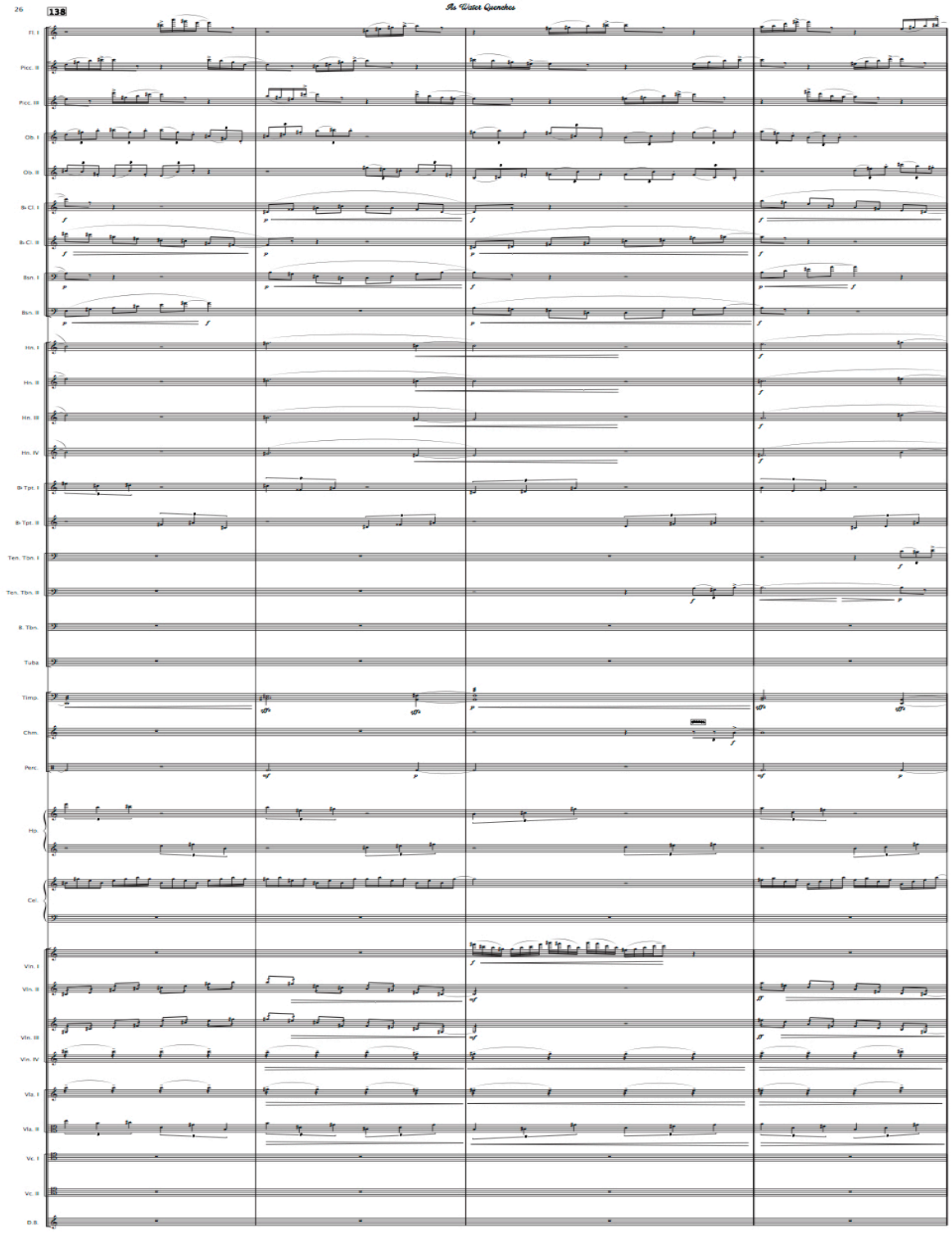

Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Perc.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

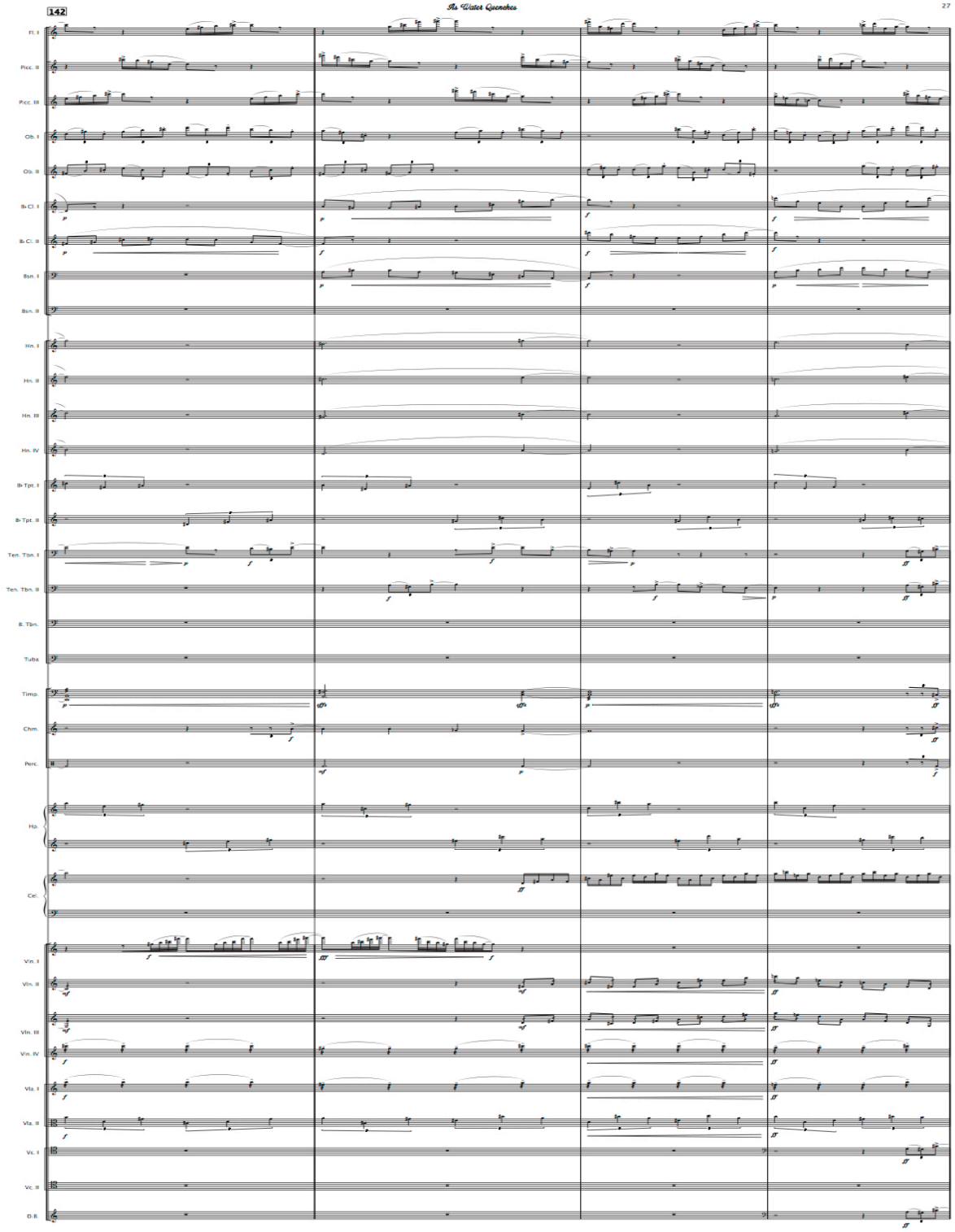

As Water Quenches
118
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Perc.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

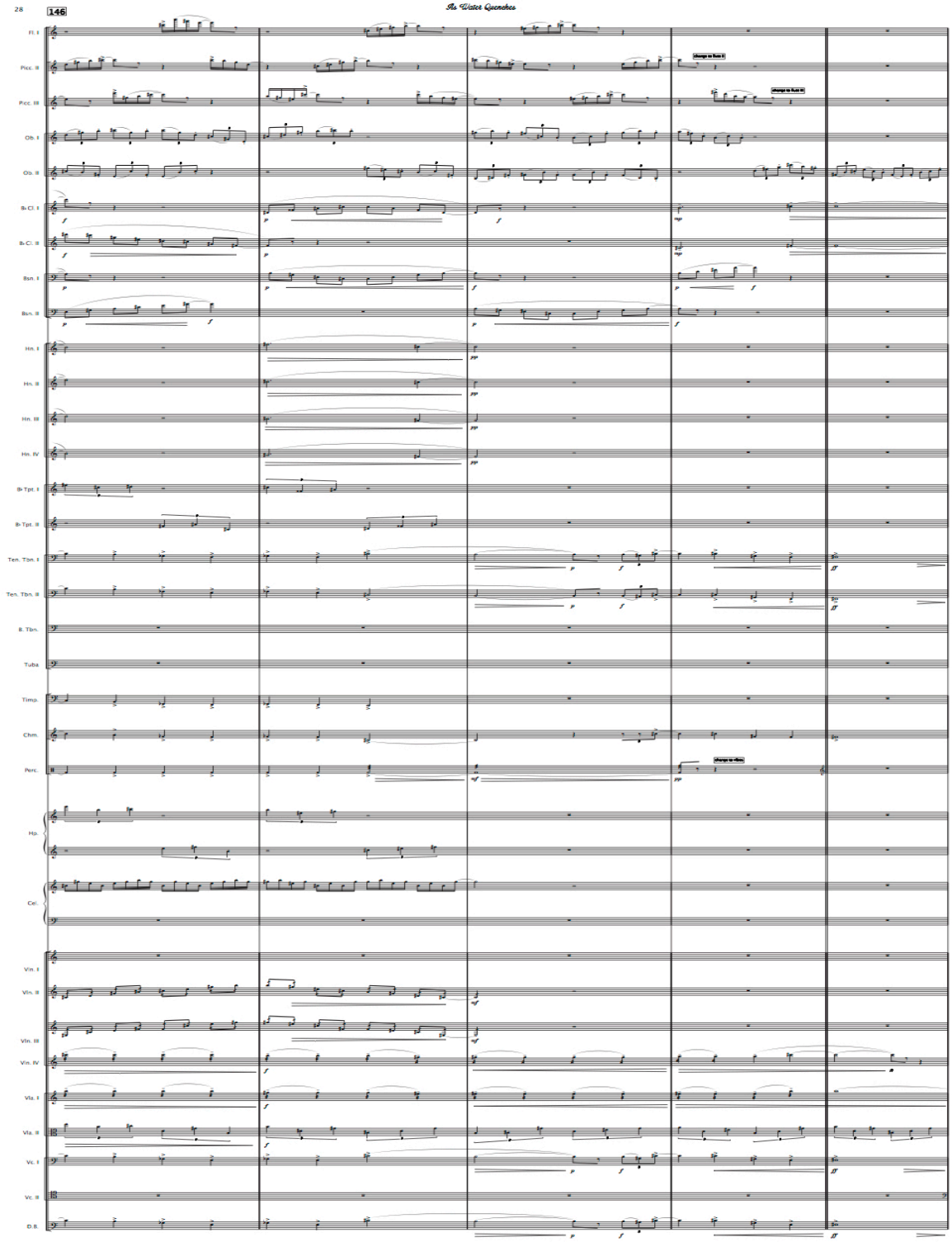

123
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Perc.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

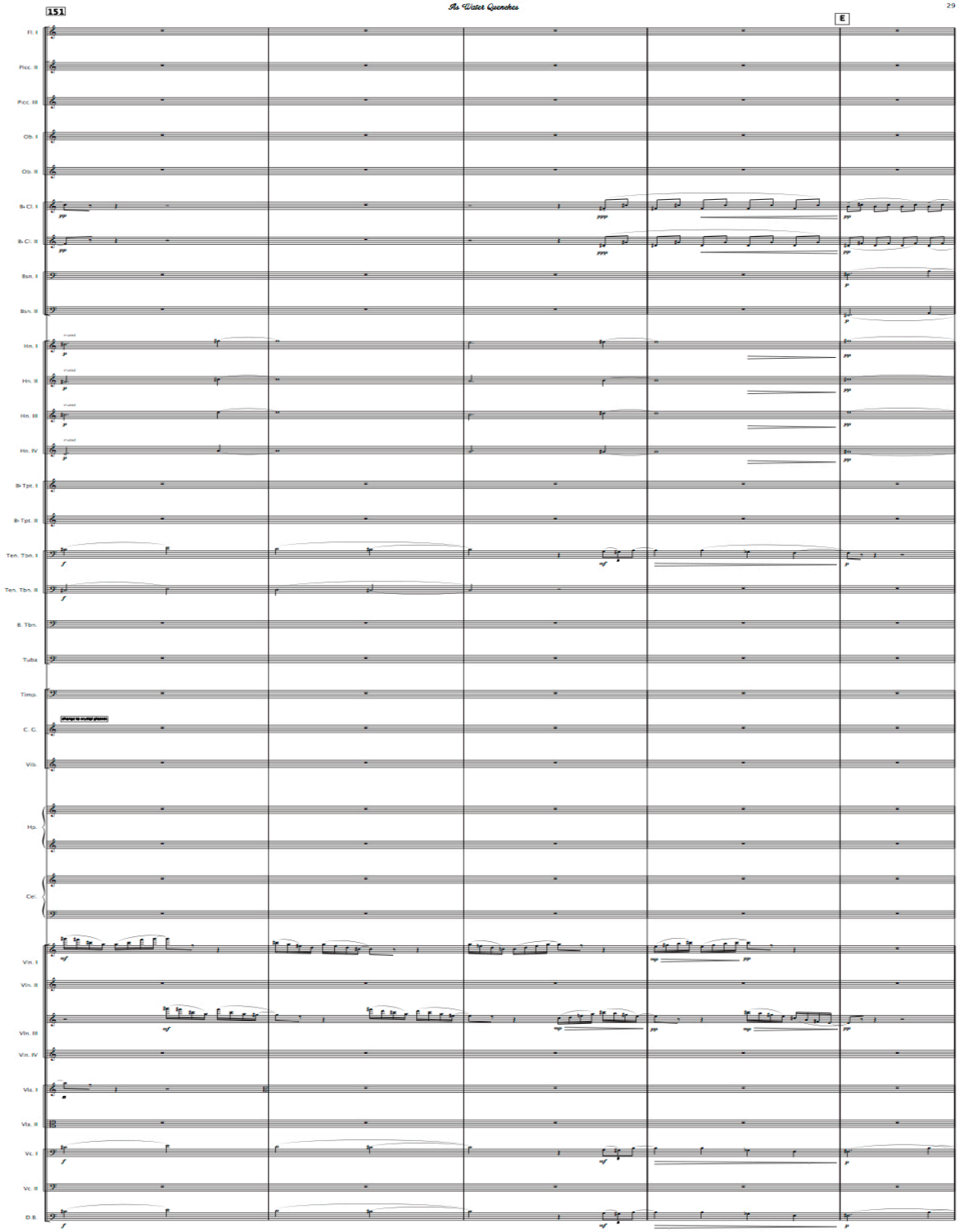

The Water Quenches
128
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Perc.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

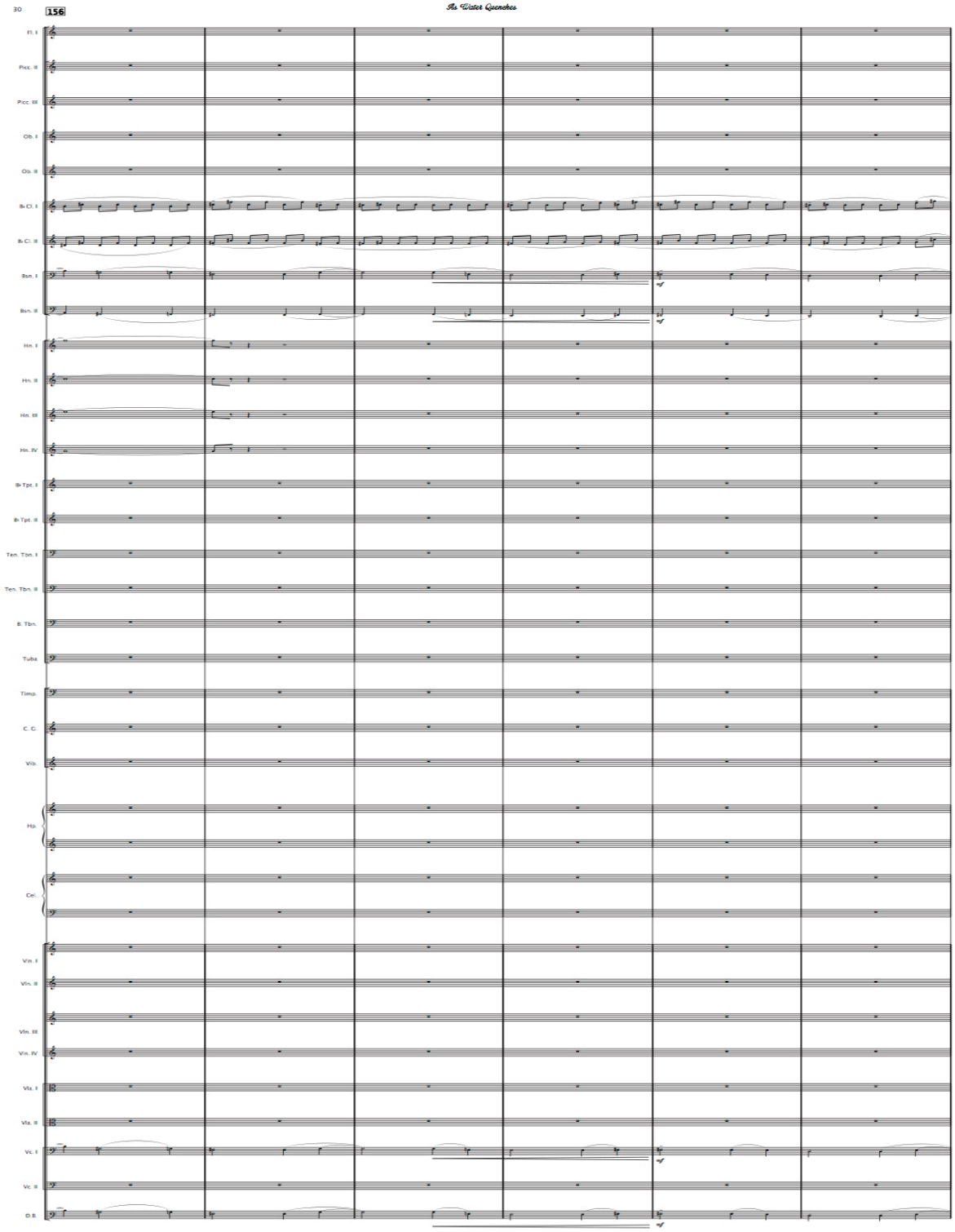

133
As Water Quenches
25
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Perc.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


26
138
As Water Quenches
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Perc.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


142
As Winter Quenches
27
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Perc.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

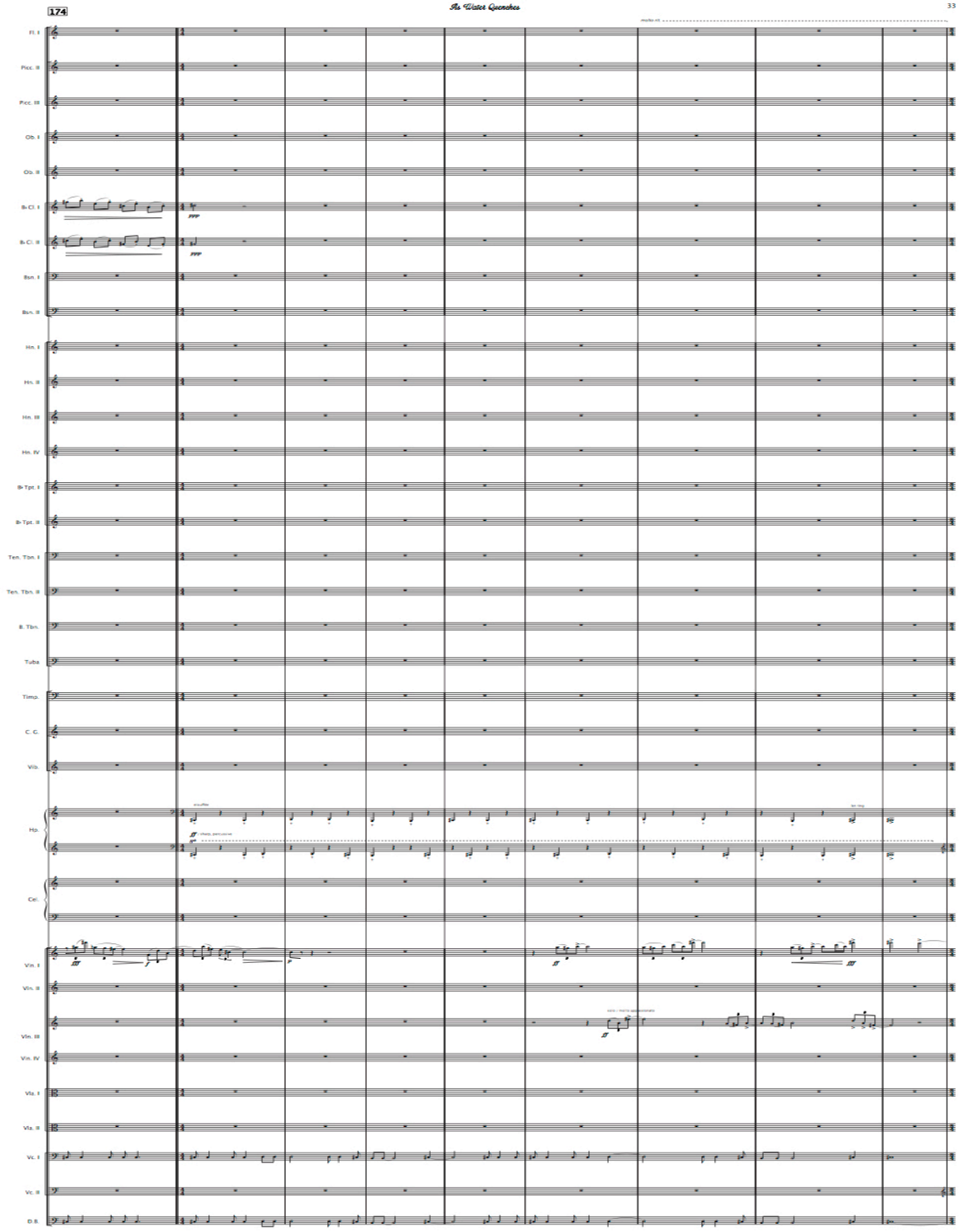

28
146
As Water Quenches
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Chm.
Perc.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


151
E
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. G.
change to crystal glasses
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


30
156
As Water Quenches
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. C.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

162
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. C.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

168
As Water Quenches
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. C.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D. B.


Fl. I
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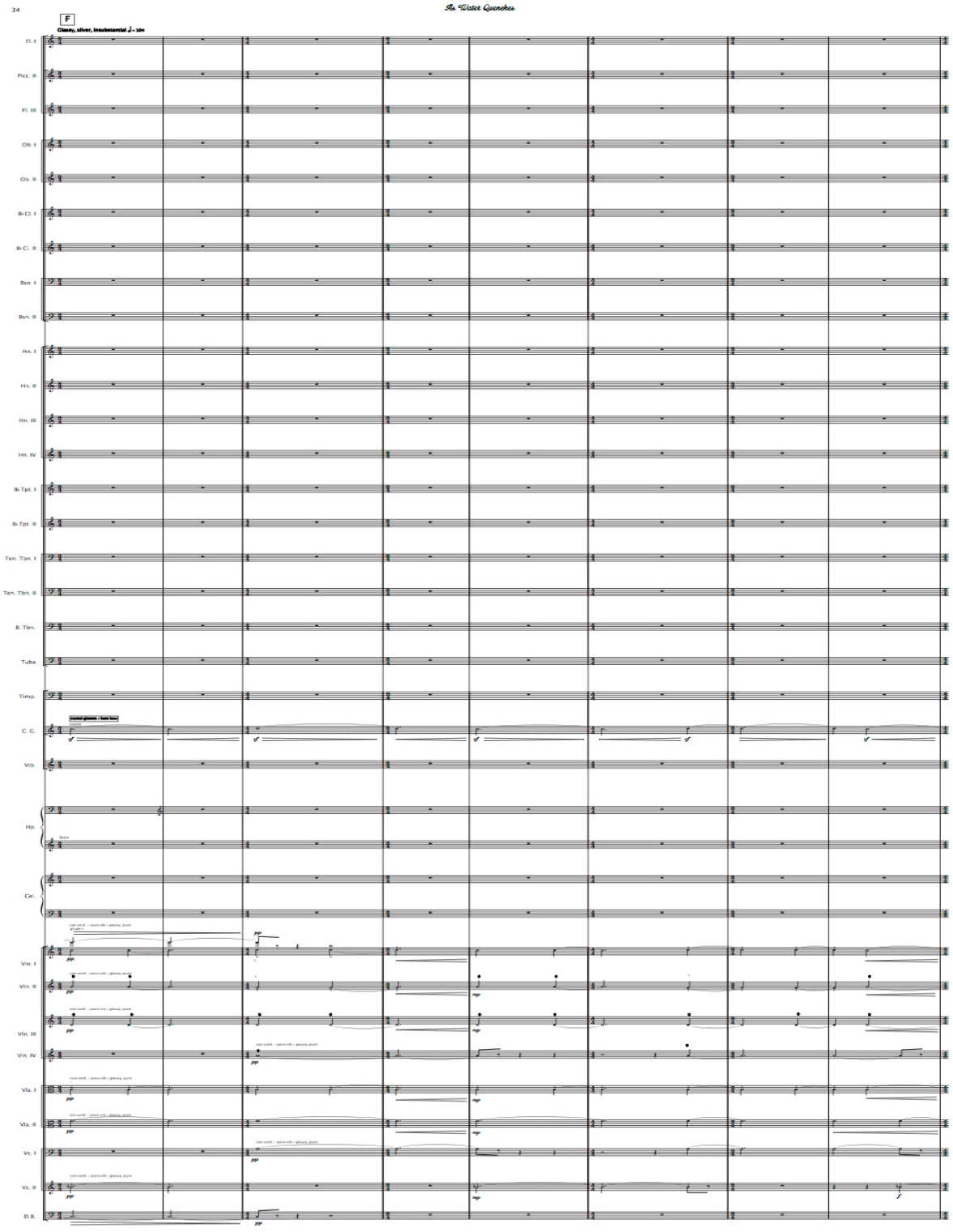
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. C.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D. B.


34
As Water Quenches
F
Classy, silver, incubescential ♩= 104
Fl. I
Picc. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ C. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. G.
Vib.
Hp.
Cel.
Vln. I
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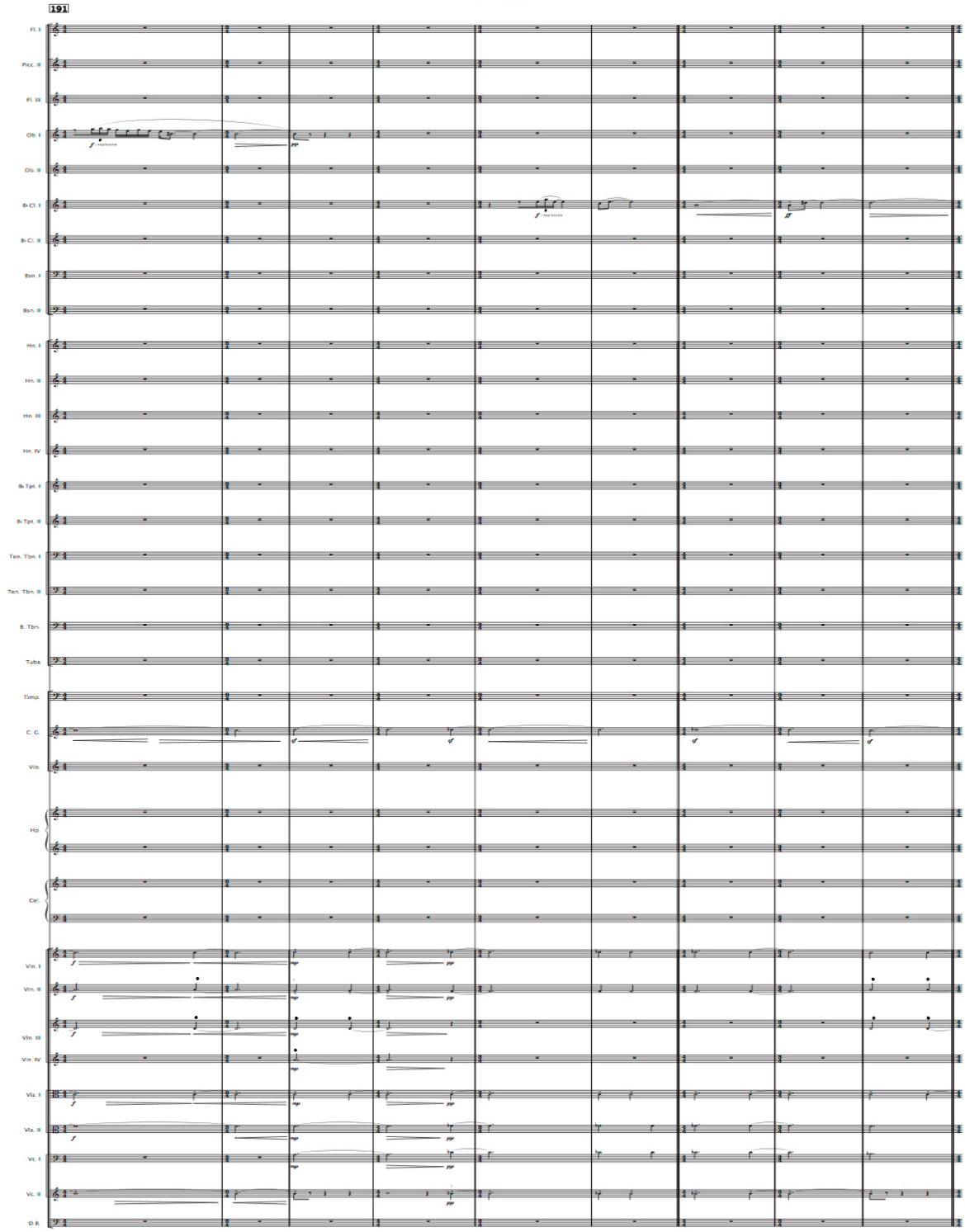
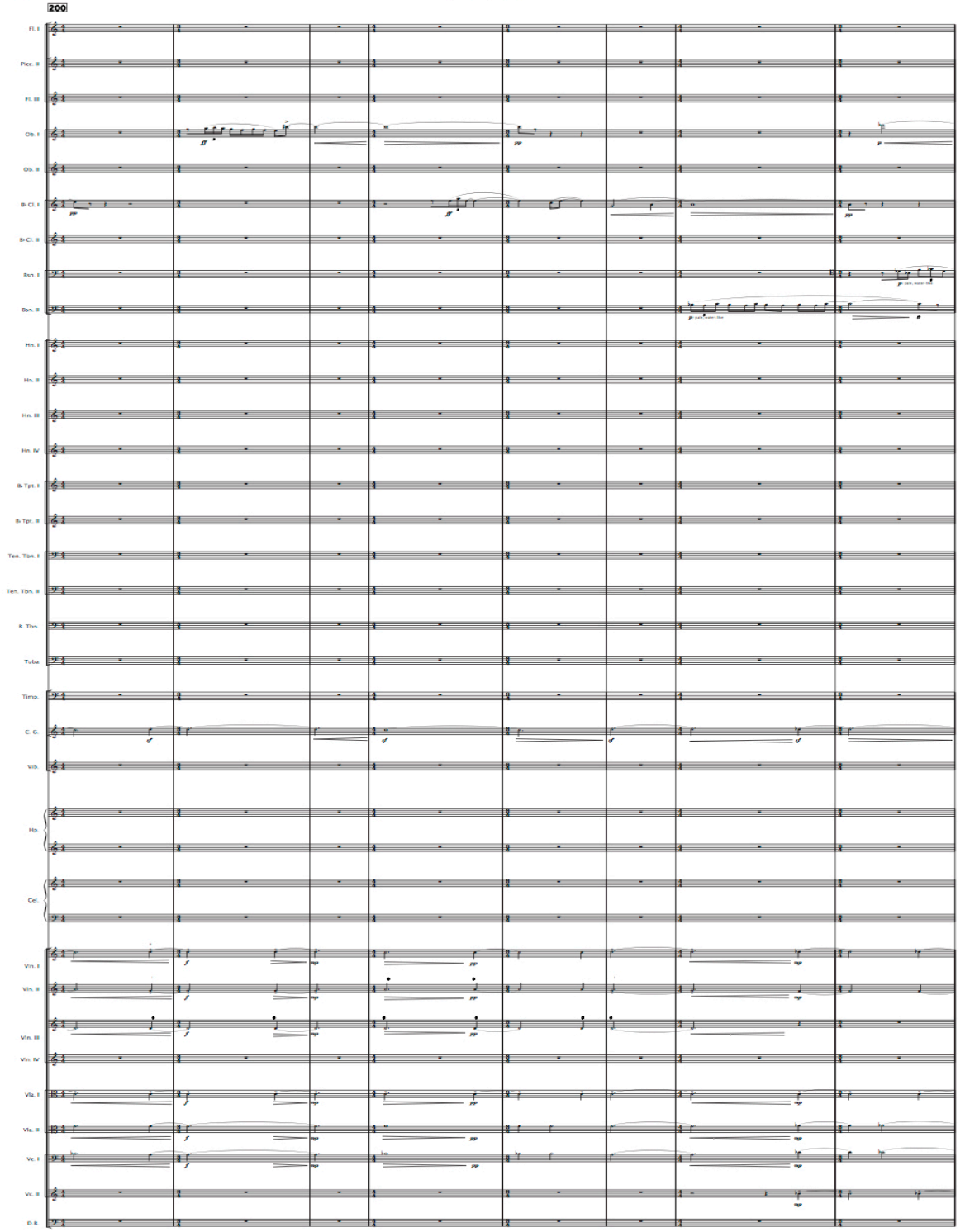
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D. B.


191
Fl. I
Picc. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. G.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


200
Fl. I
Picc. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. G.
Vib.
Hp.
Cel.
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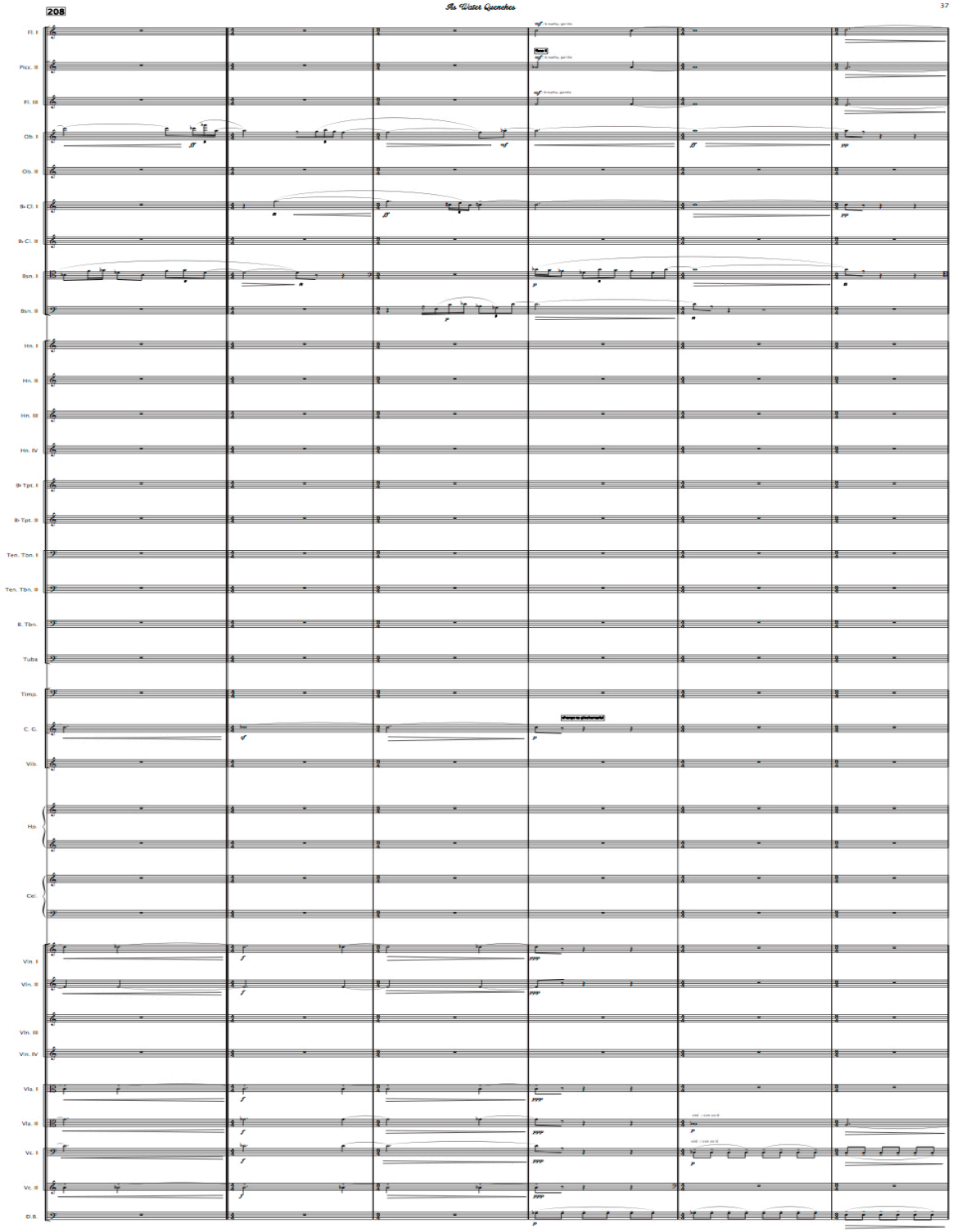
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


208
Fl. I
Picc. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. G.
Vib.
Hp.
Cel.
Vln. I
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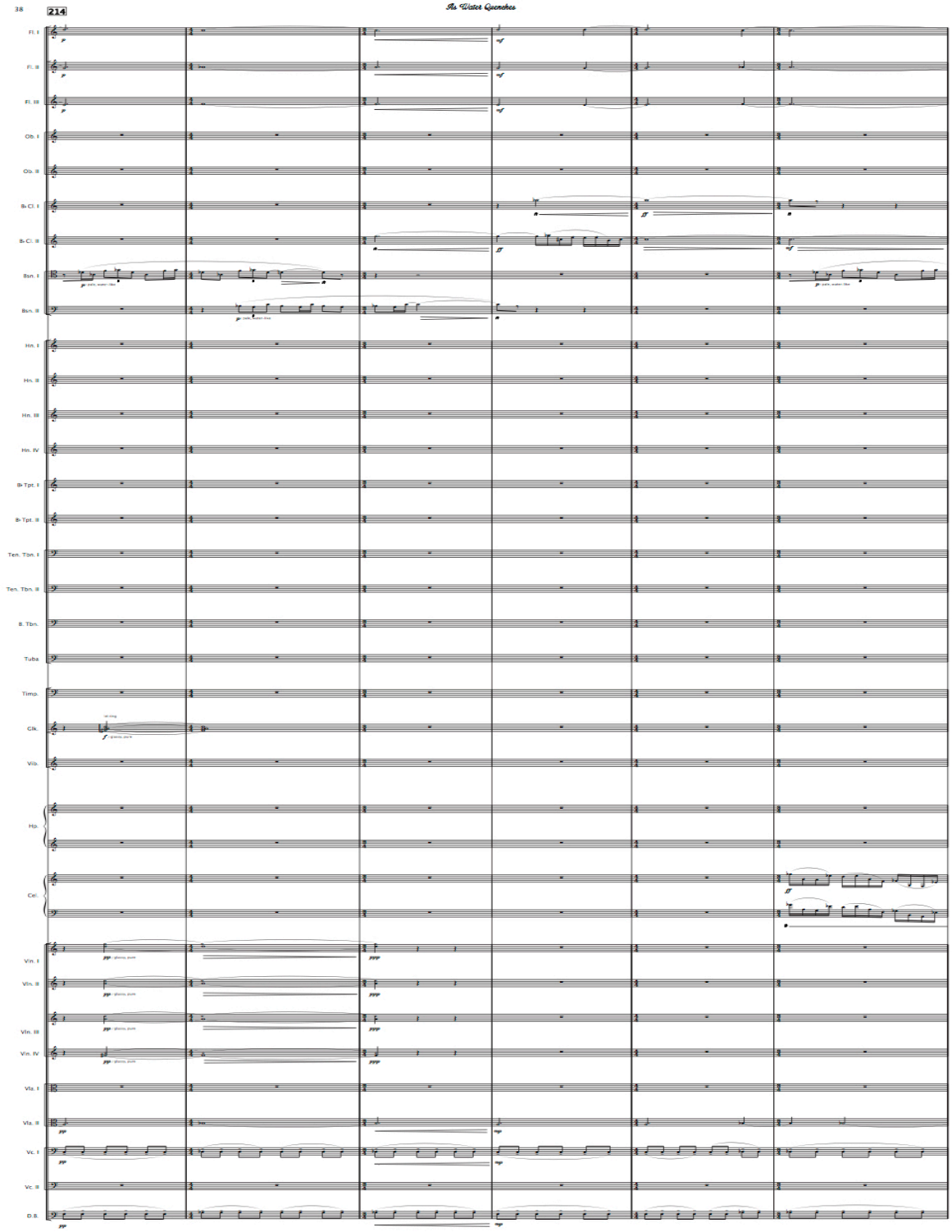
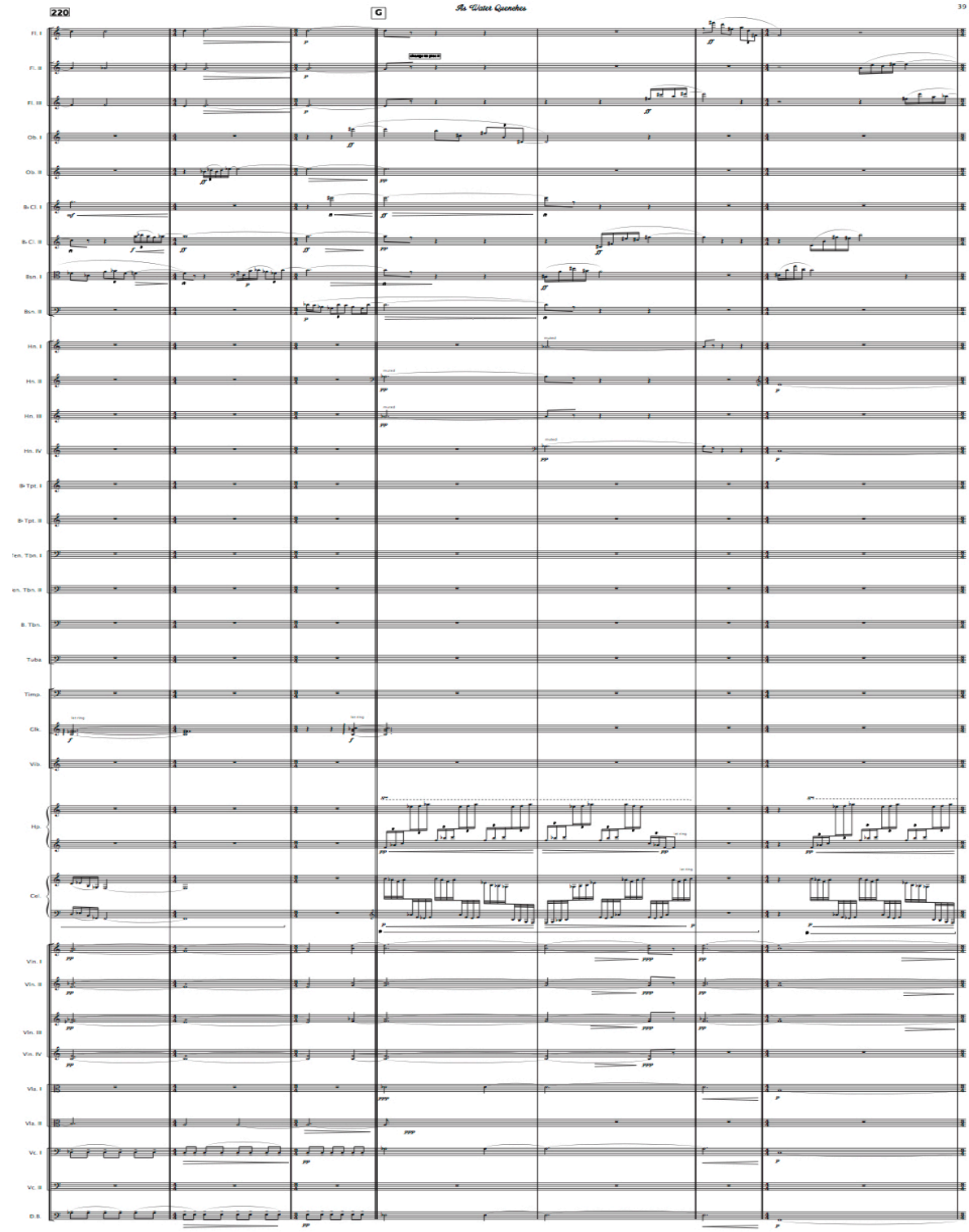
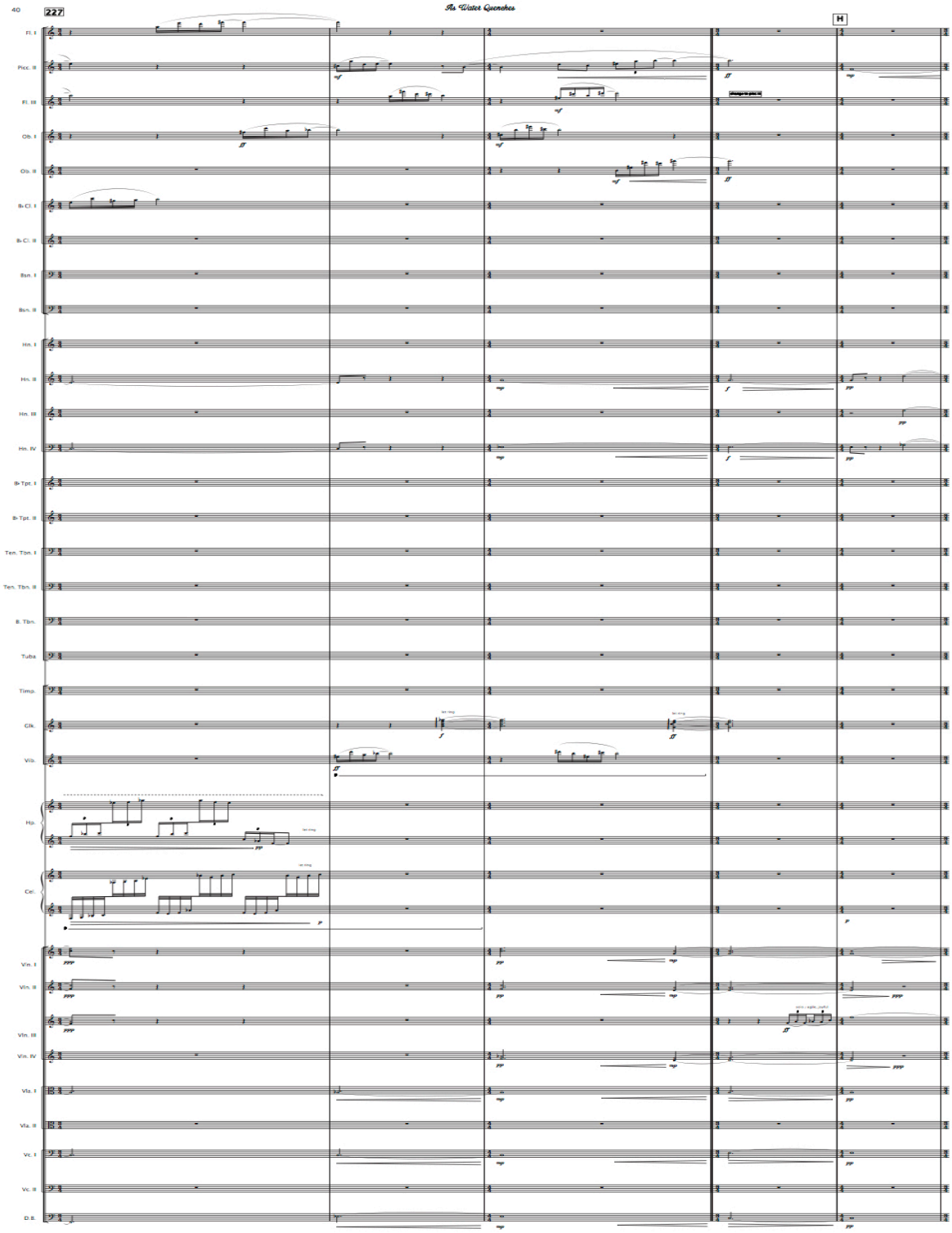
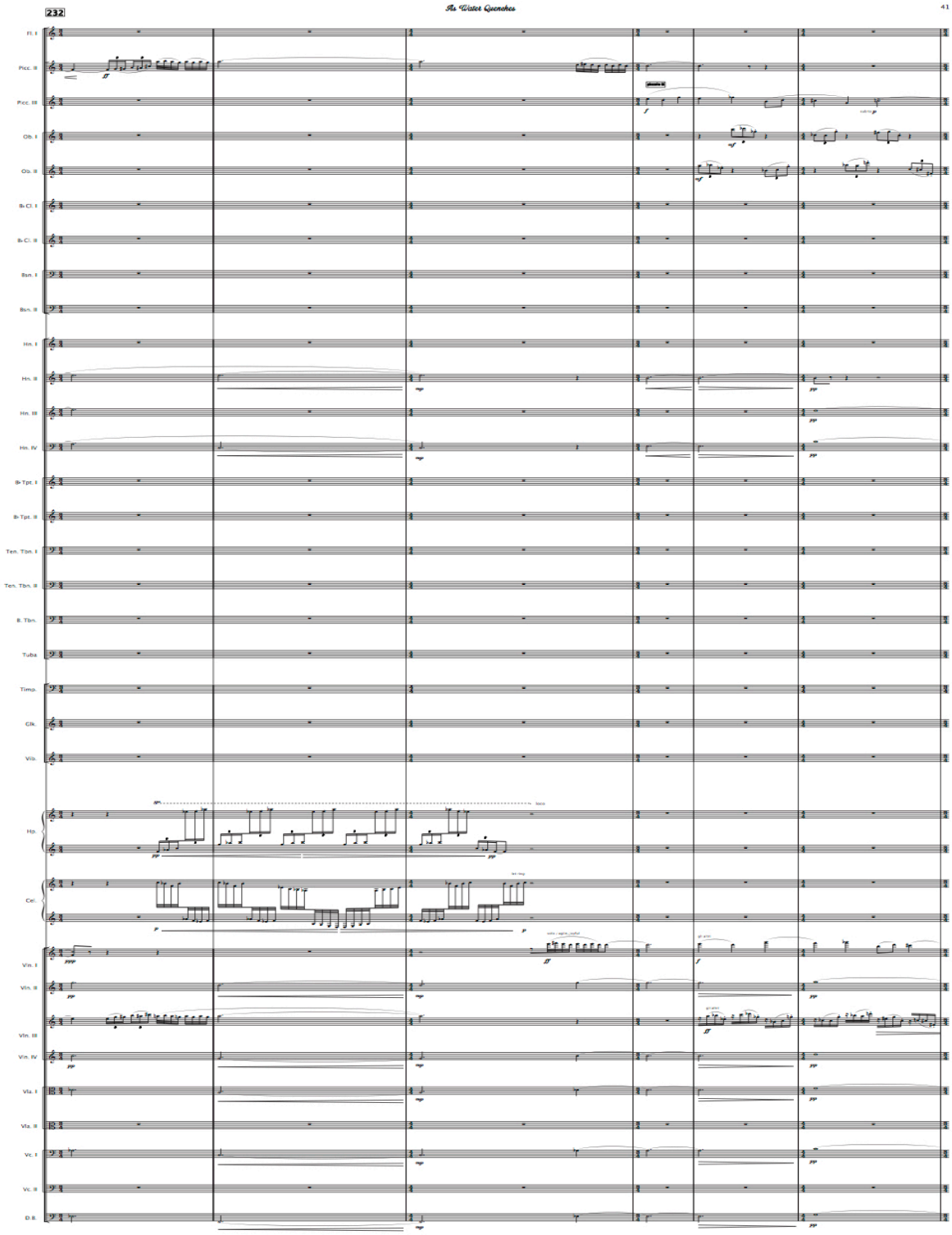
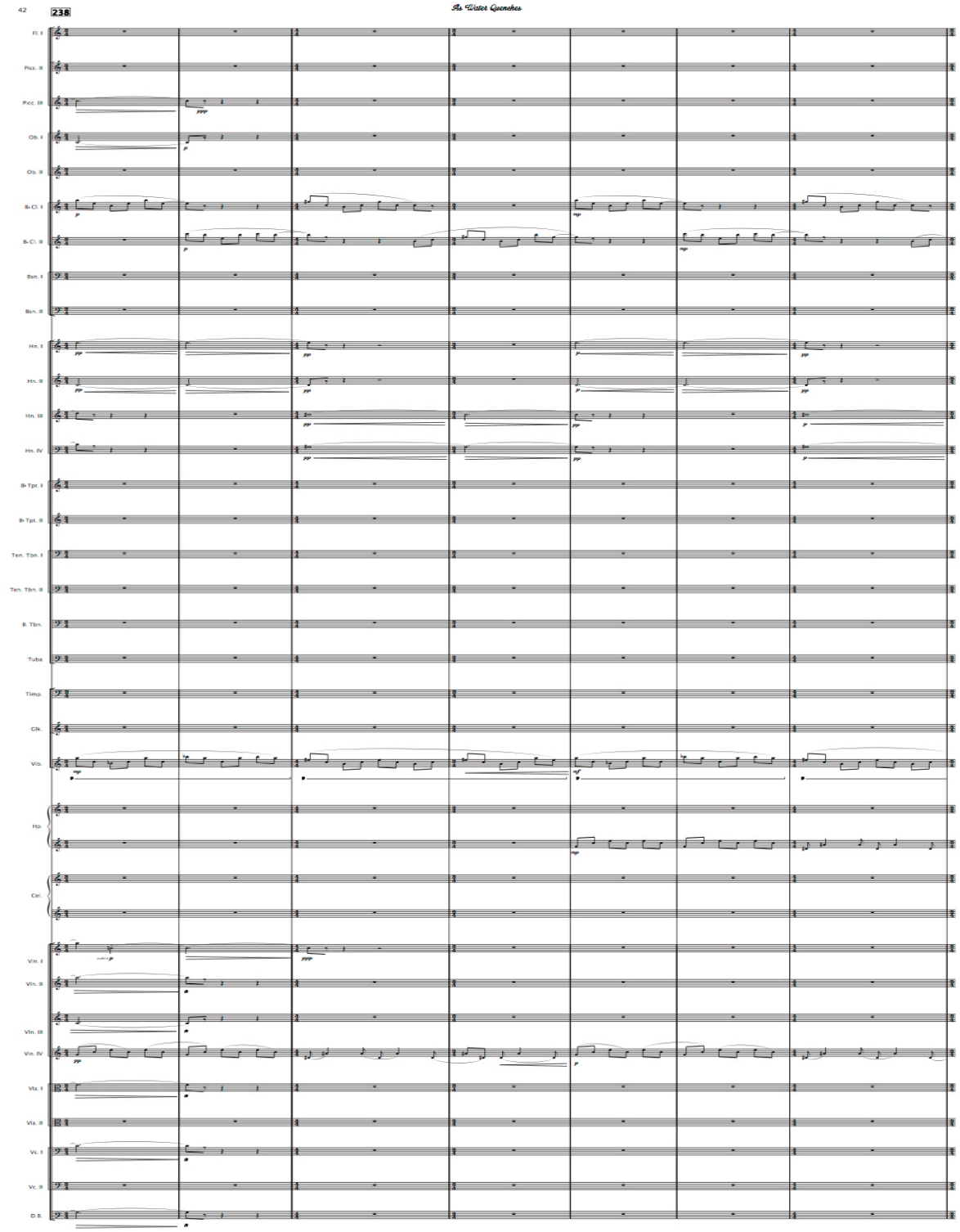
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D. B.

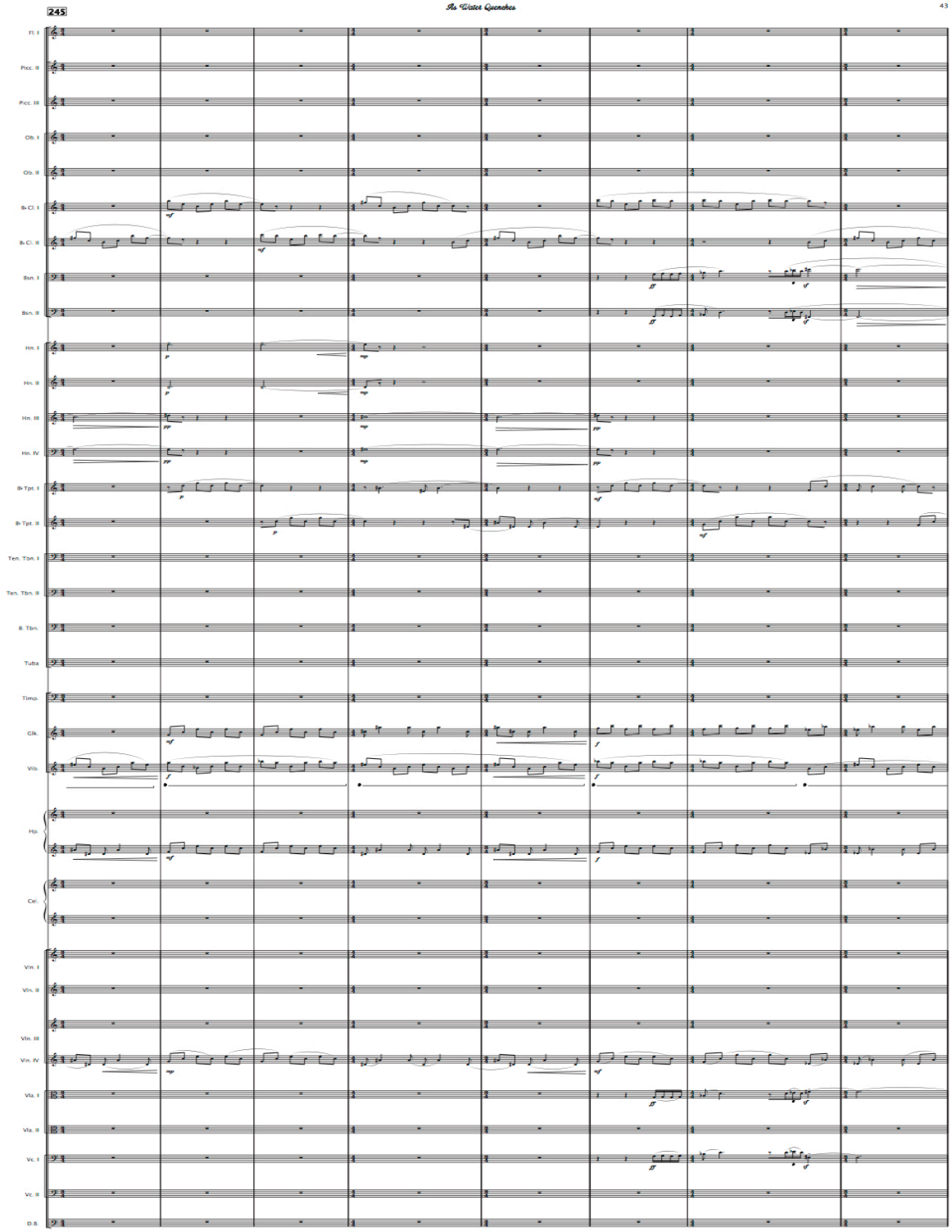

38
214
As Water Quenches
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Glk.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

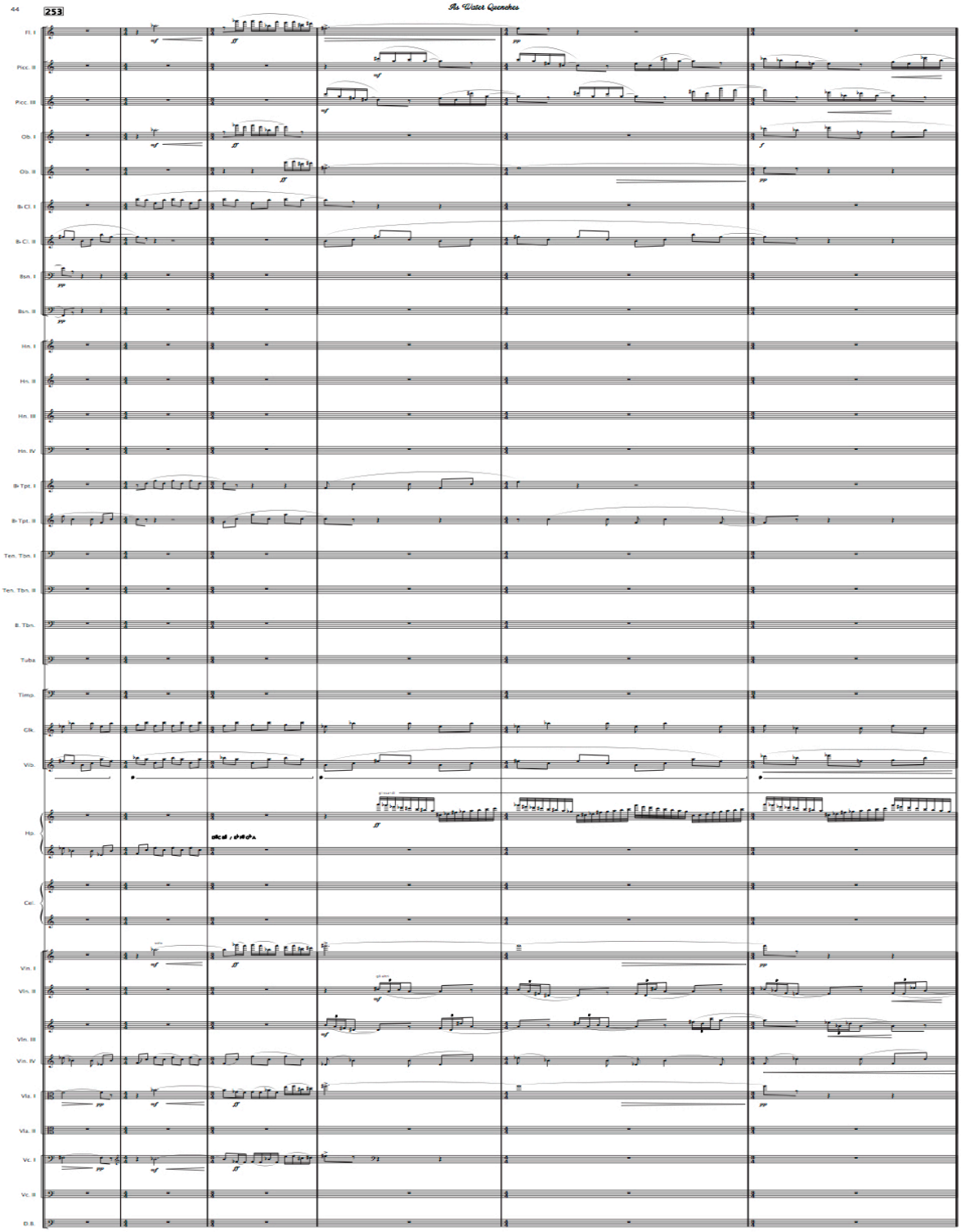

220
G
As Water Quenches
39
Fl. I
Fl. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Glk.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

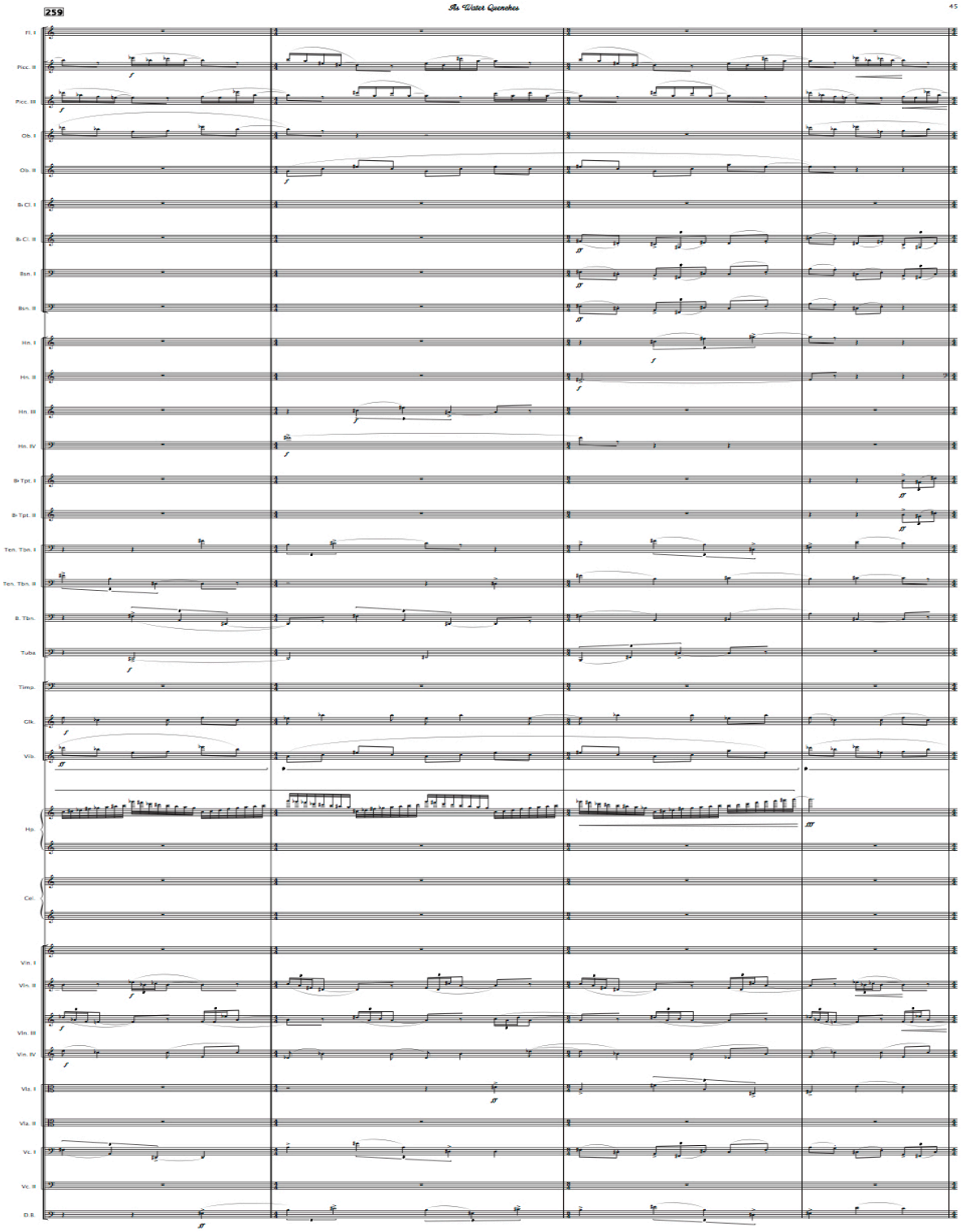

40
227
As Water Quenches
H
Fl. I
Picc. II
Fl. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Glk.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


232
As Water Quenches
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Glk.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


238
As Water Quenches
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Clk.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


245
The Water Quenches
43
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Glk.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


44
253
The Water Quenches
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Cls.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


259
The Water Quenches
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Glk.
Vib.
Hp.
Cel.
Vln. I
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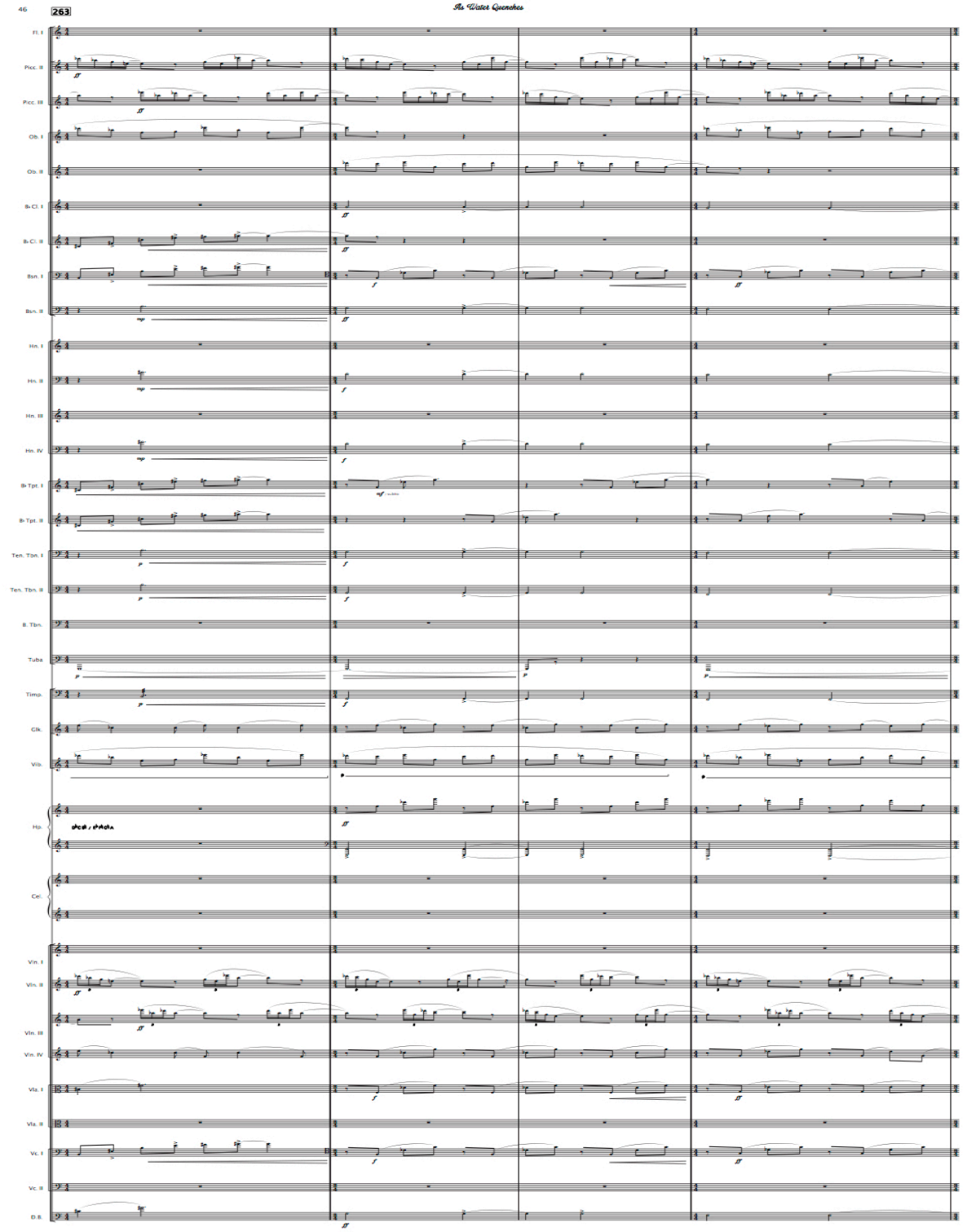
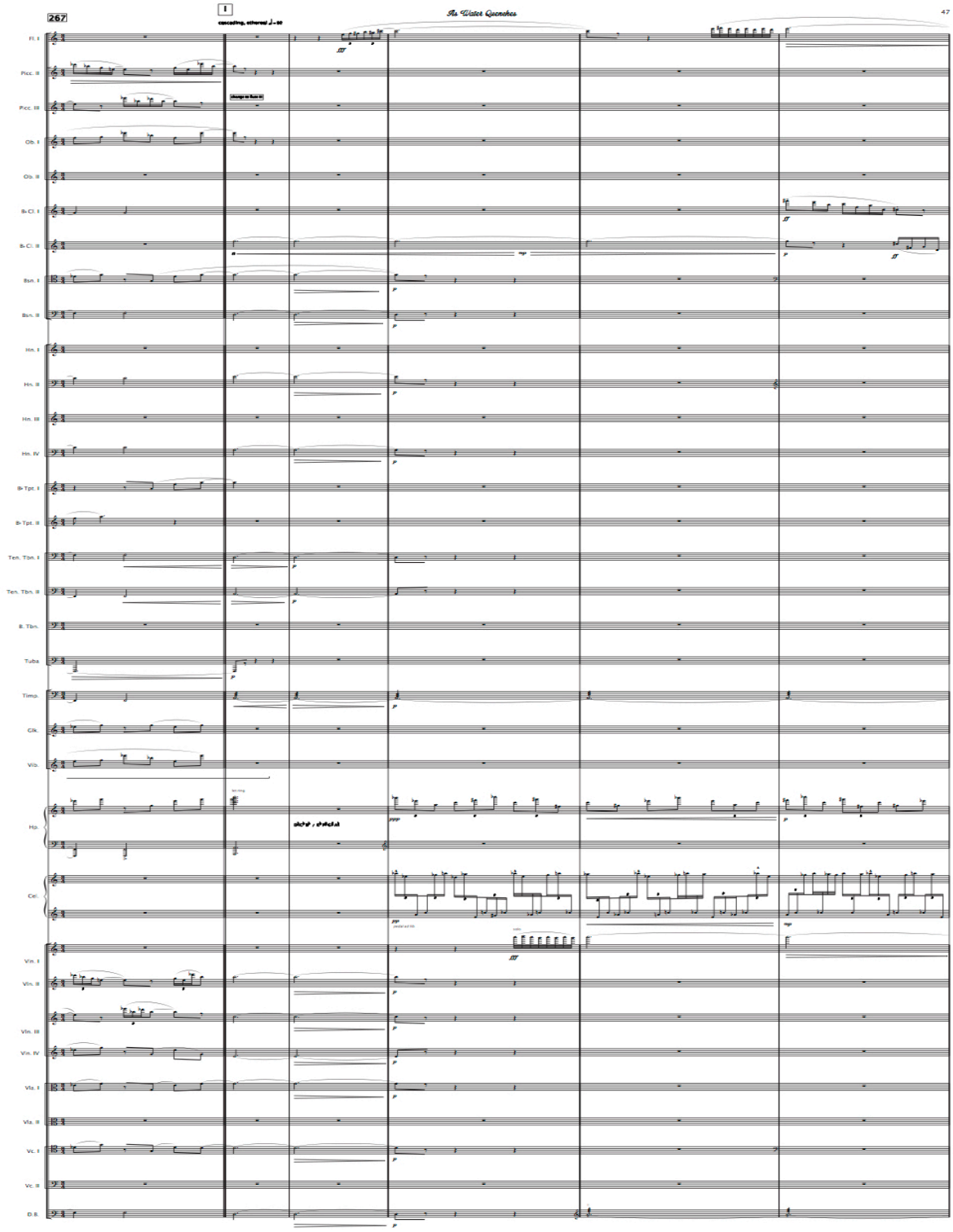
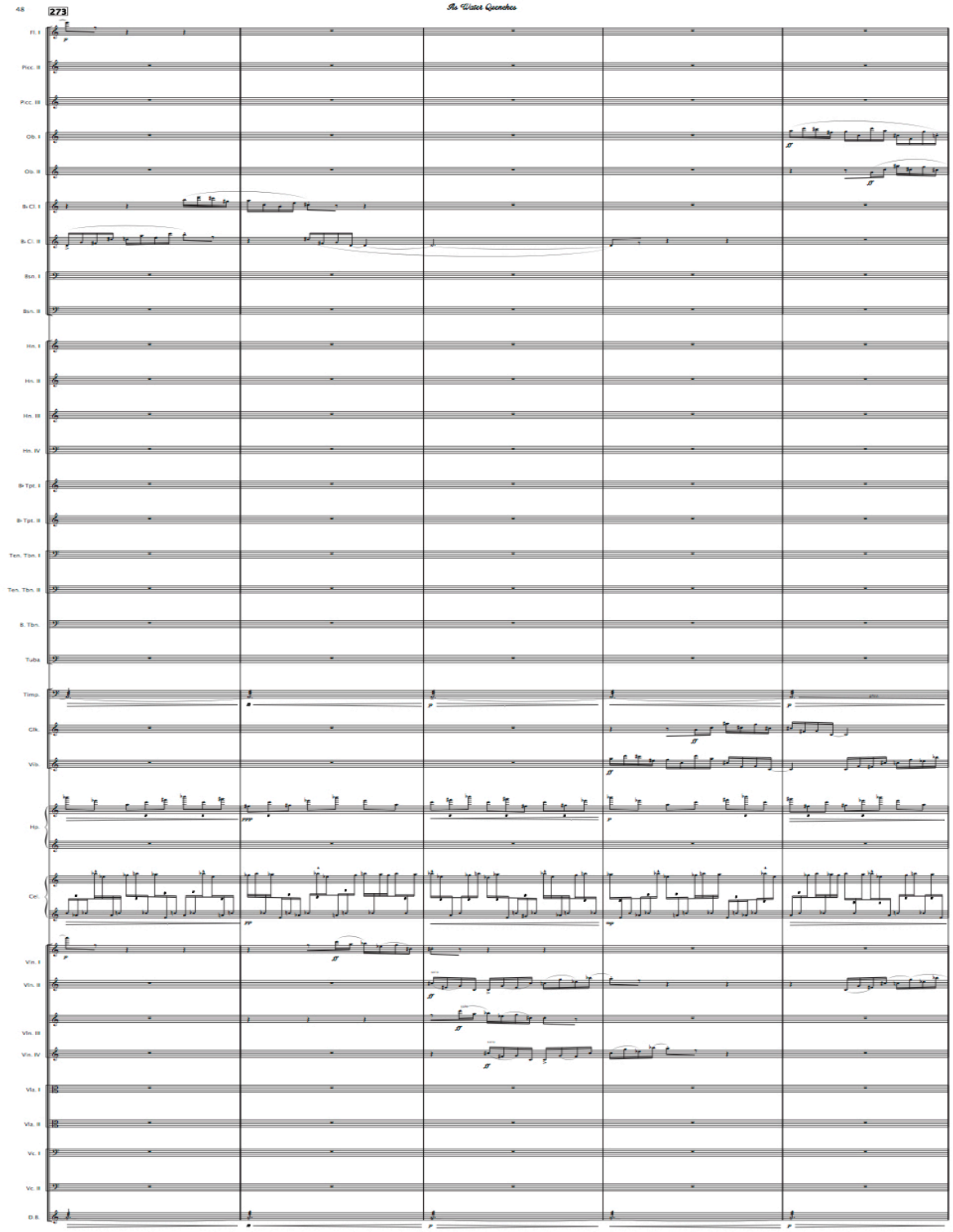
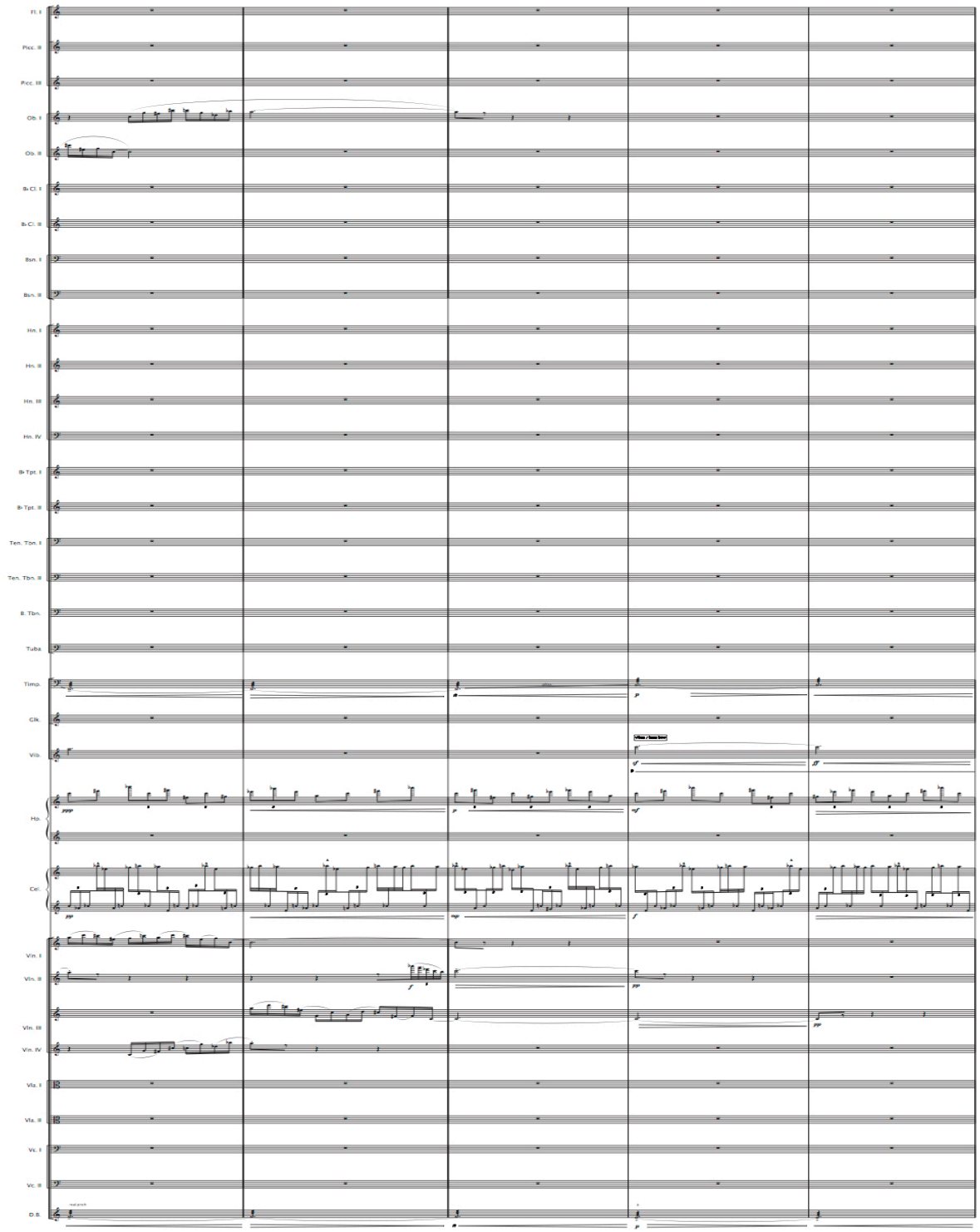
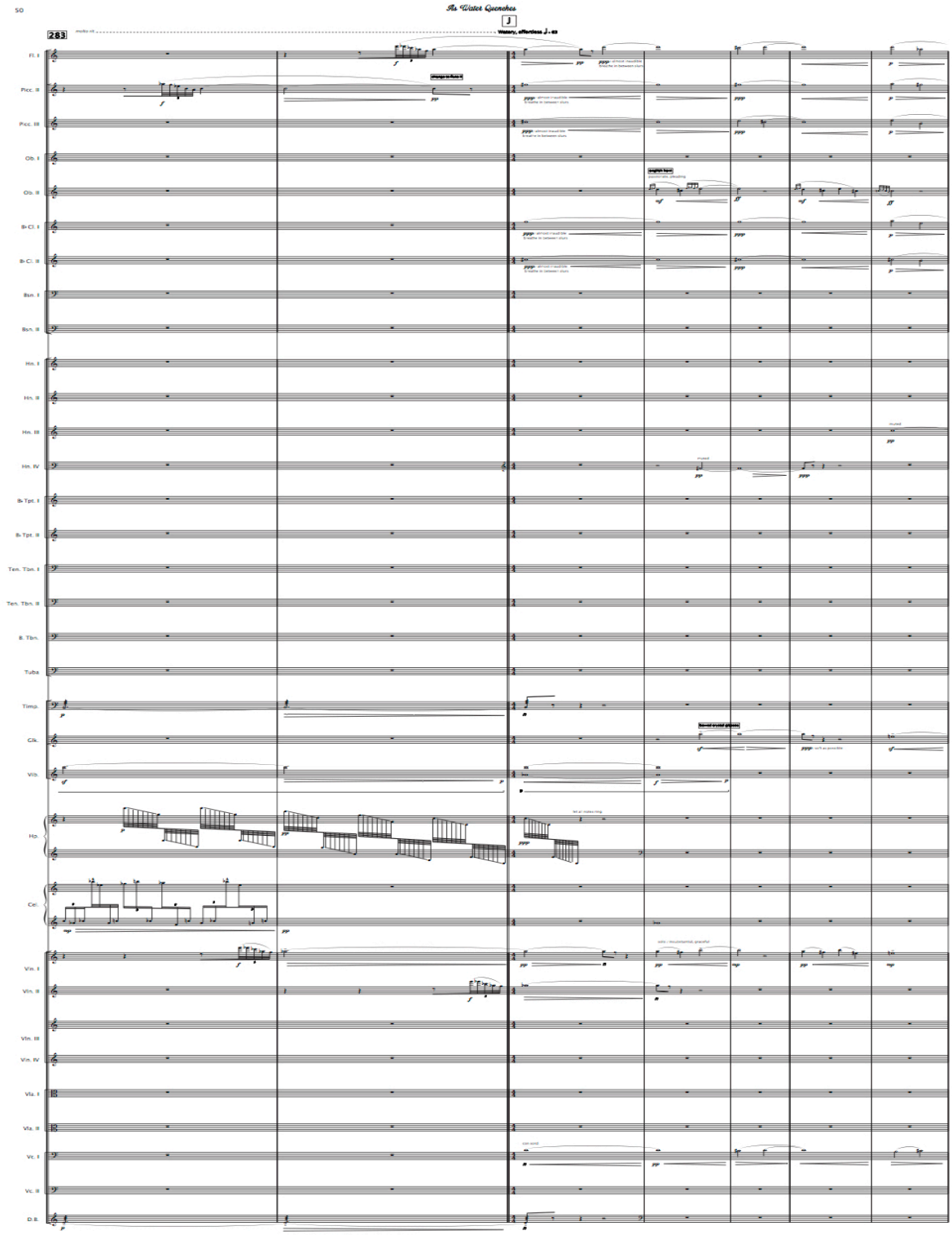
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


46
263
As Water Quenches
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Glk.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

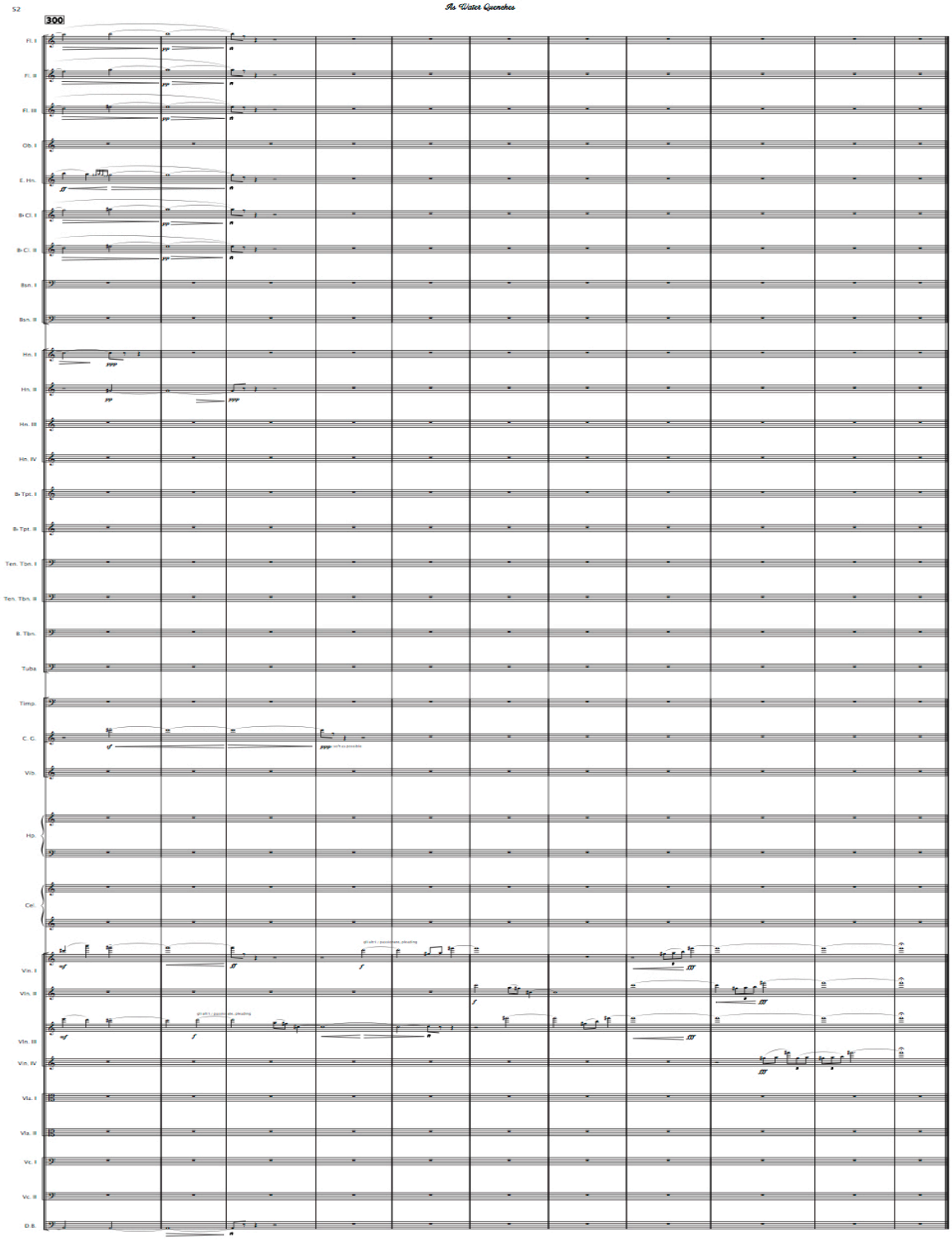

267
I
cascading, ethereal ♩ = 92
As Water Quenches
47
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Glk.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D. B.


48
273
As Water Quenches
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Glk.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. III
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. III
B. Tbn.
Tuba
Timp.
Glk.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.


50
As Water Quenches
J
283
Watery, effortless ♩. = 63
Fl. I
Picc. II
Picc. III
Ob. I
Ob. II
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
Glk.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

290
Fl. I
Fl. II
Fl. III
Ob. I
E. Hn.
B♭ Cl. I
B♭ Cl. III
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. III
Ten. Tbn. I
Ten. Tbn. III
B. Tbn.
Tuba
Timp.
C. C.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D. B.


300
Fl. I
Fl. II
Fl. III
Ob. I
E. Hn.
B♭ Cl. I
B♭ Cl. II
Bsn. I
Bsn. II
Hn. I
Hn. II
Hn. III
Hn. IV
B♭ Tpt. I
B♭ Tpt. II
Ten. Tbn. I
Ten. Tbn. II
B. Tbn.
Tuba
Timp.
C. G.
Vib.
Hp.
Cel.
Vln. I
Vln. II
Vln. III
Vln. IV
Vla. I
Vla. II
Vc. I
Vc. II
D.B.

References

Adler, Samuel. *The Study of Orchestration,* third edition. New York: W.W. Norton & Company, Inc., 2002.

"Dies Irae." Encyclopedia Britannica. July 22, 2008. Accessed April 14, 2017. https://www.britannica.com/topic/Dies-irae

Freund, Don. *Instrumental Study for Eyes and Ears.* Web. Accessed April 10, 2017. http://www.music.indiana.edu/department/composition/isfee/

Holy Bible, English Standard Version. ESV Permanent Text Edition. Crossway Bibles, 2001. Accessed April 10, 2017. https://www.biblegateway.com/passage/?search=luke+17%3A24&version=NLV

Holy Bible, New Living Version. Christian Literature International,1969. Accessed April 10, 2017. https://www.biblegateway.com/passage/?search=john+4%3 A14&version=NLV

"Pandiatonicism." *The Oxford Companion to Music*. Ed. Alison Latham. *Oxford Music Online*. Oxford University Press. Web. 2 May.2017. <http://www.oxfordmusiconline.com.ezproxy.lib.utexas.edu/subscriber/article/opr/t114/e4959>.

Solomon, Samuel Z. *How to Write for Percussion: A Comprehensive Guide to Percussion Composition*. New York: SZSolomon, 2002.